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=> file reg
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=> d his
     FILE 'LREGISTRY' ENTERED AT 14:04:19 ON 20 FEB 2003
                STR
L1
     FILE 'REGISTRY' ENTERED AT 14:27:09 ON 20 FEB 2003
              8 S L1
L2
            204 S L1 FUL
L3
                SAV L3 WAL584/A
            284 S (AG(L)X)/ELS (L) 2/ELC.SUB
L4
     FILE 'LCA' ENTERED AT 14:35:22 ON 20 FEB 2003
            116 S ((SILVER# OR AG) (W) (HALIDE# OR MONOHALIDE# OR DIHALIDE#
L5
            113 S (AGX OR AGX2 OR AGF OR AGF2 OR AGCL OR AGCL2 OR AGBR OR
L6
            720 S PHOTOG? OR IMAGE# OR IMAGING# OR PHOTOIMAG? OR REPROG?
L7
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            111 S L3
L8
          81180 S L4 OR L5 OR L6 OR AGX
L9
            108 S L8 AND (L7 OR 74/SX,SC)
L10
             94 S L8 AND L9
L11
             94 S L10 AND L11
L12
     FILE 'LREGISTRY' ENTERED AT 14:39:34 ON 20 FEB 2003
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L13
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L14
           59 S L13 SSS FUL SUB=L3
L15
                SAV L15 WAL584A/A
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             25 S L15
L16
             24 S L16 AND L9
L17
             25 S L16 AND (L7 OR 74/SX,SC)
L18
             24 S L17 AND L18
L19
             25 S L19 OR L16
L20
             70 S L12 NOT L20
L21
          6838 S CYAN OR CYANS
L22
         583531 S COUPL?
L23
             51 S L21 AND L22 AND L23
L24
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FILE 'REGISTRY' ENTERED AT 15:00:57 ON 20 FEB 2003

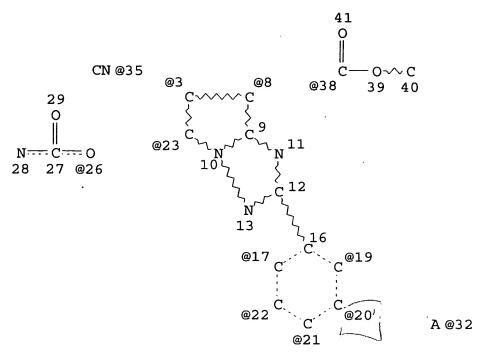
39 S L24 AND 1907-2000/PY

19 S L20 AND 1907-2000/PY

L25

L26

=> d l15 que stat L1 STR



VPA 26-23/3/8 U VPA 35-23/3/8 U VPA 38-23/3/8 U VPA 32-19/20/21/22/17 U NODE ATTRIBUTES: **NSPEC** IS RC AT28 IS RC **NSPEC** AT 32 IS RC NSPEC AT DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

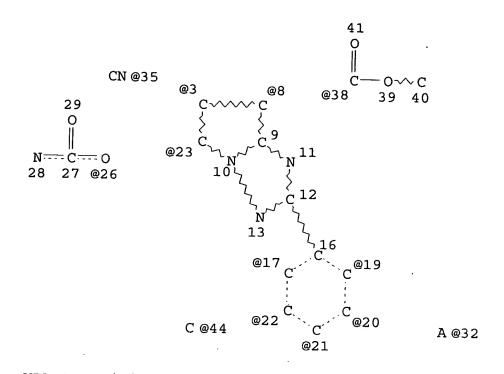
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STEREO ATTRIBUTES: NONE

L3 204 SEA FILE=REGISTRY SSS FUL L1

L13 STR



VPA 26-23/3/8 U VPA 35-23/3/8 U VPA 38-23/3/8 U VPA 32-19/20/21/22/17 U VPA 44-19/20/21/22/17 U NODE ATTRIBUTES: NSPEC IS RC AΤ 28 NSPEC IS RC AΤ 32 NSPEC IS RC AΤ 40 NSPEC IS RC ATDEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

L15 59 SEA FILE=REGISTRY SUB=L3 SSS FUL L13

100.0% PROCESSED 204 ITERATIONS

SEARCH TIME: 00.00.01

59 ANSWERS

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=> d 126 1-19 cbib abs hitstr hitind

L26 ANSWER 1 OF 19 HCA COPYRIGHT 2003 ACS

132:57058 Silver halide color photographic

material. Mizukawa, Hiroki; Naruse, Hideaki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11352647 A2 19991224 Heisei, 48 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-156185 19980604.

AB The title **photog**. material contains .gtoreq.1 of magenta couplers having .gtoreq.1 4- equiv. magenta coupler reside and .gtoreq.1 2-equiv one in their mols., and/or yellow couplers having .gtoreq.1 4-equiv yellow coupler residue and .gtoreq.1 2-equiv one in their mols., and/or cyan couplers having .gtoreq.1 4-equiv cyan coupler residue and .gtoreq.1 2-equiv one in their mols. The material shows high coloring properties in both heat development and wet development processes.

IT 252898-85-4

(silver halide color photog.

material contg. specific couplers for good coloring properties in both heat and wet development processes)

RN 252898-85-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[(diethylamino)carbonyl]oxy]-2-[3-[[[3-[[[4-[(2-ethyl-1-oxohexyl)amino]-2-hydroxyphenyl]amino]carbonyl]phenyl]sulfonyl]amino]-4-methylphenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexylester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

```
Et2N-C
                  CN t-Bu
                                   Me
  HN
                  0
                           t-Bu
IC
     ICM G03C007-34
     ICS G03C001-42; G03C007-36; G03C007-38; G03C007-392
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
     Section cross-reference(s): 28
     silver halide color photog material
ST
     magenta yellow cyan coupler
     Photographic films
IT
        (color, heat-developable; silver halide color
        photog. material contg. specific couplers for good
        coloring properties in both heat and wet development processes)
ΙT
     Cyan couplers
     Magenta couplers
     Yellow couplers
        (silver halide color photog.
        material contg. specific couplers for good coloring properties in
        both heat and wet development processes)
IT
     Photographic developers
        (sulfonamidophenols; silver halide color
       photog. material contg. specific couplers for good
        coloring properties in both heat and wet development processes)
IT
     197859-22-6
                  232949-74-5
        (developer; silver halide color
        photog. material contg. specific couplers for good
        coloring properties in both heat and wet development processes)
                                   252898-69-4P
     211380-12-0P
                    252898-68-3P
IT
        (in cyan coupler prepn.; silver halide color
        photog. material contg. specific couplers for good
        coloring properties in both heat and wet development processes)
                                               186350-88-9
IT
     78-90-0, Propylenediamine 180200-97-9
        (in cyan coupler prepn.; silver halide color
        photog. material contg. specific couplers for good
        coloring properties in both heat and wet development processes)
```

252898-60-5P

(in magenta coupler prepn.; silv r halide

color photog. material contg. specific couplers for

good coloring properties in both heat and wet development

IT

252898-58-1P

```
processes)
                                         252898-57-0
                                                       252898-59-2
                           244763-83-5
    108-30-5, reactions
IT
        (in magenta coupler prepn.; silver halide
        color photog. material contg. specific couplers for
        good coloring properties in both heat and wet development
       processes)
                    252898-64-9P
                                   252898-65-0P
    252898-63-8P
IT
        (in yellow coupler prepn.; silver halide
        color photog. material contg. specific couplers for
        good coloring properties in both heat and wet development
        processes)
                4191-73-5, Isopropyl p-hydroxybenzoate
                                                         252898-62-7
    627-18-9
IT
    252898-66-1
        (in yellow coupler prepn.; silver halide
        color photog. material contg. specific couplers for
        good coloring properties in both heat and wet development
        processes)
                                 252898-72-9
                                               252898-73-0
                                                             252898-74-1
                   252898-71-8
     180200-98-0
IT
                                                             252898-79-6
                                               252898-78-5
     252898-75-2
                   252898-76-3
                                 252898-77-4
                                                             252898-84-3
                                 252898-82-1
                                               252898-83-2
                   252898-81-0
     252898-80-9
                                 252898-87-6
                                               252898-88-7
     252898-85-4 252898-86-5
     252898-89-8
        (silver halide color photog.
        material contg. specific couplers for good coloring properties in
        both heat and wet development processes)
                                   252898-70-7P
                    252898-67-2P
IT
     252898-61-6P
        (silver halide color photog.
        material contg. specific couplers for good coloring properties in
        both heat and wet development processes)
    ANSWER 2 OF 19 HCA COPYRIGHT 2003 ACS
L26
132:28628 Silver halide color photographic
     material using novel pyrrolotriazole-type cyan coupler. Yoshioka,
     Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

(Japanese).

JP 11344793 A2 **19991214** Heisei, 70 pp.

GI

CODEN: JKXXAF. APPLICATION: JP 1998-169303 19980602.

AB In the title **photog**. material possessing .gtoreq.1 yellow-coloring, .gtoreq.1 magenta-coloring, and .gtoreq.1 cyan-coloring photosensitive **Ag halide** emulsion layers and .gtoreq.1 non-photosensitive hydrophilic colloid layer on a support, .gtoreq.1 of the cyan-coloring layers contains (a) .gtoreq.1 cyan dye-forming coupler I [Za, Zb = :CR3, :N, either one is :N and the other :CR3; R1, R2 = electron-attracting group with Hammett's substituent const. .sigma.p .gtoreq.0.20, the sum of the .sigma.p values of R1 and R2 is .gtoreq.0.65; R3 = H, substituent; X

= H, group releasing upon coupling with an oxidized arom. primary amine color developing agent; when R1-3 and X are divalent groups, the compd. may link to form a (co)polymer], (b) a compd. II, and (c) a compd. III or IV [Ra1 and Ra2 are H, alkyl or aryl; Ra3, Ra4 = H, alkyl, aryl; Ra5 = aryl, the total C no. of Ra1-a5 is .gtoreq.14; X1, X2 = OH, alkoxy, NHR4 (R4 = H, alkyl, aryl, acyl, sulfonyl, carbamoyl, sulfamoyl, alkoxycarbonyl); Y1, Y2 = substituent; n, m = 0-4]. The material provides a high quality color image without color mixing.

IT 200049-64-5

RN

CN

(photog. film contg. pyrrolotriazole deriv.
 photog. cyan coupler, phenidone, and hydroquinone deriv.)
200049-64-5 HCA
1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

```
Me
 Me-C-CH<sub>2</sub>-CMe<sub>3</sub>
     O-(CH_2)_7-Me
     ICM G03C007-392
IC
     ICS G03C007-38
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
     photog film cyan coupler pyrrolotriazole; phenidone deriv
ST
     photog film; hydroquinone deriv photog film
     Cyan couplers
IT
       Photographic films
        (photog. film contg. pyrrolotriazole deriv.
        photog. cyan coupler, phenidone, and hydroquinone deriv.)
     190436-30-7P
IT
        (bromination of; prepn. of pyrrolotriazole deriv. photog
        . cyan coupler)
     200049-62-3 200049-64-5
IT
        (photog. film contg. pyrrolotriazole deriv.
        photog. cyan coupler, phenidone, and hydroquinone deriv.)
                                                        96048-53-2
                                          80336-04-5
     903-19-5 5026-65-3
                             21182-65-0
IT
                                                220323-20-6
                                                               252208-87-0
                                  211052-27-6
     157367-05-0
                   211051-96-6
     252208-88-1
                   252208-89-2
        (photog. film contg. pyrrolotriazole deriv.
        photog. cyan coupler, phenidone, and hydroquinone deriv.)
     202483-63-4P
IT
        (photog. film contg. pyrrolotriazole deriv.
        photog. cyan coupler, phenidone, and hydroquinone deriv.)
                    188745-52-0P
     184947-09-9P
IT
        (photog. film contg. pyrrolotriazole deriv.
        photog. cyan coupler, phenidone, and hydroquinone deriv.)
     194419-30-2P
                    194419-31-3P
IT
         (prepn. of pyrrolotriazole deriv. photog. cyan coupler)
     105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl
IT
                                                          163119-16-2,
                25761-72-2, Diallylcarbamoyl chloride
     2,6-Di-tert-butyl-4-methylcyclohexanol
                                               194419-32-4
         (prepn. of pyrrolotriazole deriv. photog. cyan coupler)
```

L26 ANSWER 3 OF 19 HCA COPYRIGHT 2003 ACS

131:279219 Silver halide color photographic material containing bisurethane or bisureido compound. Mikoshiba, Takashi; Soejima, Susumu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11271940 A2 19991008 Heisei, 69 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-71020 19980319.

GI

The title photog. material, possessing .gtoreq.1 AΒ Ag halide emulsion layer on a support, contains .gtoreg.1 a compd. m-X2CONR2C6H4NR1COX1 (R1, R2 = H, aliph. group, aryl; X1, X2 = OR4, NR5R6; R4-6 = H, aliph. group, aryl, R1, R5, and R6 are not alkyl at the same time). The material may contain .gtoreq.1 a compd. I (R1, R2, R4, X1, and X2 are the same as defined for the above formula, resp.; R3 = H, substituent; R5, R6 = H, aliph. group, aryl; n = 0-4; this compd. has no ability of reacting with an oxidized color developing agent to form a dye) and .gtoreq.1 a cyan coupler II [Za, Zb = :CR13, :N, either one is :N and the other : CR13; R11, R12 = electron-attracting group with Hammett's substituent const. .sigma.p .gtoreq.0.20, the sum of .sigma.p values of R11 and R12 is .gtoreq.0.65; R13 = H, substituent; X3 = H, group releasing upon coupling with an oxidized arom. primary amine developing agent, R11-13 and X3 may be divalent groups which link to a polymer higher than dimer or polymer chain to form a (co)polymer]. The material shows improved coloring properties and storage stability and provides a high color quality image with improved lightfastness and without cyan stain.

IT 200049-64-5

(silver halide color photog.
material contg. bisurethane or bisureido compd. and
pyrolotriazole cyan coupler)

RN 200049-64-5 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-

tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Me
$$Me - C - CH_2 - CMe_3$$
 $O - (CH_2)_7 - Me$

IC ICM G03C007-392 ICS G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide photog bisurethane bisureido; pyrolotriazole cyan coupler silver halide photog

IT Photographic emulsions

(color; silver halide color photog. material contg. bisurethane or bisureido compd. and

pyrolotriazole cyan coupler)

Cyan couplers ΙT

(silver halide color photog.

material contq. bisurethane or bisureido compd. and pyrolotriazole cyan coupler)

IT 126360-49-4 223564-71-4 245439-71-8 245439-72-9 245439-73-0 245439-74-1 245439-75-2 245439-76-3 245439-78-5 245439-79-6 245439-80-9 245439-81-0 245439-82-1 245439-83-2 245439-84-3 245439-86-5 245439-87-6 245439-88-7 245439-90-1 245439-85-4 245439-91-2 245439-92-3 245439-93-4 245439-94-5 245439-95-6 245439-97-8 245439-98-9 245439-96-7

(dispersion medium in coupler-contg. layer; silver

halide color photog. material contg.

bisurethane or bisureido compd. and pyrolotriazole cyan coupler) 153273-52-0 179330-29-1 151019-64-6 178743-91-4 IT 143324-39-4 200049-63-4 200049-64-5 184947-09-9 188745-52-0 200110-89-0 200110-90-3 200110-91-4 200137-20-8 200137-21-9 200137-23-1 200216-40-6 211051-73-9 211051-76-2 217456-51-4 245440-03-3 245440-04-4 245439-99-0 245440-00-0 245440-02-2 245440-45-3 245440-05-5 245440-06-6

(silver halide color photog.

material contq. bisurethane or bisureido compd. and pyrolotriazole cyan coupler)

ANSWER 4 OF 19 HCA COPYRIGHT 2003 ACS L26

131:235677 Phenidone compound and silver halide color photographic paper containing the same. Mikoshiba, Takashi; Yoshioka, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11246785 A2 19990914 Heisei, 55

pp. 19980302.

Ι

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-49809

GI

The Ag halide color photog. paper contains the phenidone compd. represented by a general formula I (L = alkylene; R1 = alkyl, aryl; R2, R3 = H, alkyl, aryl; R4-8 = H, substituent) and a cyan coupler represented by a general formula II (Za, Zb = -C(Rc):, -N:; Ra, Rb = electron withdrawing group having Hammett substituent const. delta.p .gtoreq.0.20; Rc = H, substituent; X = H, coupling group). The photog. paper shows excellent color reprodn. and improved storage stability.

IT 200049-65-6 243986-82-5

(cyan coupler in silver halide color photog. paper)

RN 200049-65-6 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 243986-82-5 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[[bis(2-carboxyethyl)amino]carbonyl]oxy]-2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxohexyl]amino]-4-methylphenyl]-6-cyano-,
7-[2,6-bis(1,1-dimethylethyl)cyclohexyl] ester (9CI) (CA INDEX NAME)

 $CH_2 - CH_2 - CO_2H$

 $-C-N-CH_2-CH_2-CO_2H$

Me

- Me

Bu-n

Et-C-

(prepn. of cyan coupler for silver halide color photog. paper)

- IT 50-00-0, Formaldehyde, reactions 64-17-5, Ethanol, reactions 95-92-1, Diethyl oxalate 100-63-0, Phenylhydrazine 141-52-6, Sodium ethoxide 50772-35-5 243986-77-8 (prepn. of phenidone compd. for silver halide
- color photog. paper)
 IT 243986-74-5P 243986-75-6P 243986-76-7P
 (prepn. of phenidone compd. for silver halide color photog. paper)
- L26 ANSWER 5 OF 19 HCA COPYRIGHT 2003 ACS
 131:206897 Color photographic film, manufacture of color filter using
 the same, and color filter for display. Mizukawa, Hiroki (Fuji
 Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11231481 A2
 19990827 Heisei, 73 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 1998-28943 19980210.
- The color photog. film contains a yellow-colored cyan coupler AB Q1(TIME)n-L1m-(YDYE) [Q1 = cyan dye forming coupler residue; TIME = timing group; L1 = divalent connection group; YDYE = yellow dye residue; n, m = 0-3] or A1-N:N-R1 [A1 = cyan dye forming coupler residue; R1 = aryl, heterocycle], a magenta-colored cyan coupler Q2-(TIME)n-L2m-(MDYE) [Q2 = cyan dye forming coupler residue; TIME = timing group; L2 = divalent connection group; MDYE = magenta dye residue; m, n = 0-3] or A2-N:N-R2 [A2 = cyan dye forming coupler residue; R2 = aryl, heterocycle], and a yellow-colored magenta coupler Q3-(TIME)n-L3m-(YDYE) [Q3 = magenta dye forming coupler residue; TIME = timing group; L3 = divalent connection group; YDYE = yellow dye residue; n, m = 0-3] or A3-N:N-R3 [A3 = magenta dye forming coupler residue; R3 = aryl, heterocycle]. The excellent color filter is obtained easily by using the above colored couplers. IT 240812-14-0

(magenta-colored cyan coupler in color photog. film for manufg. color filter of display)

RN 240812-14-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[[3-(aminosulfonyl)-4-[(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)azo]phenyl]ethylamino]carbonyl]oxy]-6-cyano2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-,
2,4-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

IC ICM G03C007-333

ICS G02B005-20; G03C005-08; G03C007-20

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 73

IT 240812-11-7 240812-12-8 240812-13-9 **240812-14-0** 240812-15-1

(magenta-colored cyan coupler in color photog. film for manufg. color filter of display)

L26 ANSWER 6 OF 19 HCA COPYRIGHT 2003 ACS

130:344973 Silver halide photographic

material for color filter formation. Mizukawa, Hiroki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11109123 A2 19990423 Heisei, 48 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-267112 19970930.

GΙ

The material contains a red dye- or a magenta dye-releasing coupler AB having a formula Q1(TIME) nLmDY or a red or magenta colored coupler having a formula Q2N:NR1 [Q1, 2 = coupler residue I, II, or III; TIME = timing group that releases (TIME)n-1LmDY after eliminating Q1 or timing group that releases (TIME)n-2LmDY after being eliminated from TIME; R1 = aryl, heterocyclic; n, m = 0, 1, 2, 3; L = divalent group; DY = red or magenta dye residue; R2 = alkyl, cycloalkyl, alkenyl, aryl, heterocyclic, alkoxy, cycloalkyloxy, alkenyloxy, aryloxy, alkylamino, cycloalkylamino, alkenylamino, arylamino, heterocyclic amino; R3, 4 = substituent; p = 0-3 integer; R5, 7, 8 = H, substituent; q = 0-4 integer; M = CO, SO2; R6 = alkyl, cycloalkyl, aryl, heterocyclic, alkoxy, cycloalkyloxy, aryloxy, heterocyclicoxy, alkylamino, cycloalkylamino, arylamino, heterocyclic amino; Z1, 2 = N, CR9; R9 = H, alkyl, cycloalkyl, alkenyl, aryl, heterocyclic]. The method involves exposing the material, color-developing, and desilverizing to obtain the filter having a blue, green; and red pixel pattern. The filter contains the coupler. The filter with light transmittance, excellent heat and light fastness, and thin film thickness is manufd. using the material.

223734-81-4 224045-18-5 224045-35-6

(Ag halide photog. material for

color filter contg. red or magenta coupler)

RN 223734-81-4 HCA

IT

CN

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-(2-benzothiazolylazo)-2-[3-[[[[7-[[[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl]oxy]carbonyl]-6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-1H-pyrrolo[1,2-b][1,2,4]triazol-5-yl]oxy]carbonyl]methylamino]phenyl]-6-

cyano-, 2-carboxyethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{CH}_2) \\ \text{7} \\ \text{O} \\ \text{N} \\ \text{N$$

PAGE 1-B

$$\begin{array}{c|c}
 & O \\
 & C \\$$

224045-18-5 HCA RNCN

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

5-[[[[1,4-bis(acetylamino)-3-oxo-3H-phenothiazin-7-yl]ethylamino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[(1-oxoisooctadecyl)amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 224045-35-6 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[[1,4-bis(acetylamino)-2-chloro-3-oxo-3H-phenoxazin-7yl]ethylamino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[(1oxoisooctadecyl)amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

```
G02B005-20
IC
     ICM
          G02B005-22; G03C007-20; G03C007-333; G03C007-34; G03C007-38;
     ICS
          G03C007-407
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
    photog material color filer magenta coupler; red coupler
ST
     color filter photo material
     Optical filters
IT
       Photographic films
        (Ag halide photog. material for
        color filter contg. red or magenta coupler)
     223734-74-5P
IT
        (Ag halide photog. material for
        color filter contg. red or magenta coupler)
                  73164-51-9
                               194419-31-3
IT
     35675-46-8
        (Ag halide photog. material for
        color filter contg. red or magenta coupler)
                    223734-70-1P
     223734-69-8P
                                    223734-72-3P
IT
        (Ag halide photog. material for
        color filter contg. red or magenta coupler)
                                  223734-76-7
                                                              223734-78-9
IT
     223734-73-4
                   223734-75-6
                                                223734-77-8
                   223734-80-3 223734-81-4 224045-18-5
     223734-79-0
     224045-35-6
        (Ag halide photog. material for
        color filter contq. red or magenta coupler)
```

L26 ANSWER 7 OF 19 HCA COPYRIGHT 2003 ACS
130:59003 Silver halide color diffusion-transfer
photographic material containing dye-scavenging polymer to
improve whiteness of background. Taguchi, Toshiki (Fuji Photo Film
Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10301246 A2
19981113 Heisei, 68 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1997-118898 19970422.

GΙ

$$\begin{array}{c|c}
R^1 & R^3 \\
R^2 & R^4 \\
NHX + Y = Z + P & I
\end{array}$$

AB The photog. material contg. a photog. Ag
halide, a binder, a chromogenic coupler, and a developing
agent selected from I (R1-5 = H, substituent; A = OH, substituted
amino; X = polyvalent linkage selected from CO, SO, SO2 PO:; Y, Z =
N, CR5:; n .gtoreq.0; P = proton-releasing group or cationic group)
and II (Y = bivalent linkage; Z = nucleophile) is characterized by
incorporation of a scavenger which traps diffusible colorant present
in the developing environment. Preferable scavenger is vinyl
polymers having an onium group. The material gives images
with good background whiteness due to the scavenger.

IT 217088-50-1

(cyan coupler; silver halide color diffusion-transfer photog. material contg. dye-scavenging polymer to improve whiteness of background) 1088-50-1 HCA

RN 217088-50-1 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-5-[[(didodecylamino)carbonyl]oxy]-2-[4-methyl-3[(methylsulfonyl)amino]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

IC ICM G03C008-36 ICS G03C008-40; G03C008-52

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST diffusion transfer **photog** film color; dye scavenger onium diffusion transfer **photog**; onium polymer scavenger **photog** material; redn additive color **photog** material

IT Diffusion-transfer photographic films

(color; silver halide color

diffusion-transfer photog. material contg.

dye-scavenging polymer to improve whiteness of background)

IT 217088-50-1

(cyan coupler; silver halide color

diffusion-transfer photog. material contg.

dye-scavenging polymer to improve whiteness of background)

IT 217088-47-6 217088-48-7 217088-49-8

(developer; silver halide color

diffusion-transfer **photog**. material contg.

dye-scavenging polymer to improve whiteness of background)

IT 209794-95-6P 209794-98-9P 213608-77-6P 213608-81-2P

(developer; silver halide color

diffusion-transfer photog. material contg.

dye-scavenging polymer to improve whiteness of background)

IT 182640-41-1 189759-41-9 217088-54-5 217088-56-7 217088-58-9 (dye scavenger; silver halide color

diffusion-transfer photog. material contg.

dye-scavenging polymer to improve whiteness of background)

IT 217088-51-2

(magenta coupler; silver halide color

diffusion-transfer photog. material contg.

dye-scavenging polymer to improve whiteness of background)

IT 209794-96-7P 217088-59-0P

(redn. of; silver halide color

diffusion-transfer **photog**. material contg.

dye-scavenging polymer to improve whiteness of background)

IT 152243-21-5P 189188-01-0P 189188-02-1P 209794-94-5P 209794-97-8P 217088-60-3P

(silver halide color diffusion-transfer photog. material contg. dye-scavenging polymer to improve whiteness of background)

IT 81-08-3, o-Sulfobenzoic anhydride 111-92-2, Dibutylamine 112-96-9, Octadecyl isocyanate 121-57-3 501-24-6, m-Pentadecylphenol 1694-92-4, o-Nitrobenzenesulfonyl chloride 5930-28-9, 2,6-Dichloro-4-aminophenol 7632-00-0, Sodium nitrite 10025-87-3, Phosphorus oxychloride 24974-75-2 34630-52-9, Lauryloxypropylamine 41755-73-1 74918-57-3, 2-Hexyldecanoyl chloride

(silver halide color diffusion-transfer photog. material contg. dye-scavenging polymer to improve whiteness of background)

IT 217088-52-3

(yellow coupler; silver halide color diffusion-transfer photog. material contg. dye-scavenging polymer to improve whiteness of background)

L26 ANSWER 8 OF 19 HCA COPYRIGHT 2003 ACS 129:182044 Silver halide color photographic

material. Ito, Takayuki; Matsuoka, Mitsuyuki; Shimata, Yasuhiro; Matsuda, Naoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10198012 A2 19980731 Heisei, 46 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-260172 19970925. PRIORITY: JP 1996-318564 19961115.

GI

$$R^{1}$$
 R^{2}
 R^{2}
 R^{4}
 R^{5}
 R^{5}

The Ag halide color photog. material comprises a coupler I (R1,2 = electron-withdrawing group with Hammett's substituent const. 0.2.ltoreq..sigma.p.ltoreq.1.0; R3 = substituent; n = 0-4; Q = NHCO, NHSO2, CONH, etc.; R4 = NHCOH, etc.; R5 = substituent; m = 0-4; X = coupling off group) in at least .gtoreq.1 layer formed on a support. The coupler showed good coor-forming property even at a low oil content.

Ι

IT 211380-21-1

(coupler contained in silver halide color photog. material)

RN

NAME)

CN

211380-21-1 HCA 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[3-[[[2-[[4-(dodecyloxy)benzoyl]amino]phenyl]sulfonyl]amino]-2-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX

PAGE 1-A

PAGE 1-B

IT 211380-15-3P

(coupler contained in **silver halide** color **photog**. material)

RN 211380-15-3 HCA

1H-Pyrrolo[1,2-b] [1,2,4]triazole-7-carboxylic acid,
6-cyano-5-[(di-2-propenylamino)carbonyl]oxy]-2-[3-[[2[(dodecylsulfonyl)amino]benzoyl]amino]-4-methylphenyl]-,
2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{H}_2\text{C} = \text{CH} - \text{CH}_2 \text{ O} \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} - \text{C} - \text{O} \\ \text{t} - \text{Bu} \\ \text{O} - \text{C} \end{array}$$

IT 211380-18-6P 211380-19-7P

(coupler contained in silver halide color

photog. material)

RN 211380-18-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[(di-2-propenylamino)carbonyl]oxy]-2-(4-methyl-3nitrophenyl)-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

Me NO2 O
$$CH_2-CH = CH_2$$
O $CH_2-CH = CH_2$
O CH

RN 211380-19-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-(3-amino-4-methylphenyl)-6-cyano-5-[[(di-2propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

Me NH₂ O
$$CH_2-CH=CH_2$$
 O $CH_2-CH=CH_2$ O $CH_2-CH=CH_2$ Me $CH_2-CH=CH_2$ O $CH_2-CH=CH_2$ Me $CH_2-CH=CH_2$ O $CH_2-CH=CH_2$

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IC
     ICM G03C007-38
     ICS G03C001-00; G03C007-00
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
ST
     silver halide color photog material;
     coupler silver halide color photog
     Photographic couplers
IT
        (silver halide color photog.
        material)
                                211380-22-2
IT
     211380-20-0 211380-21-1
        (coupler contained in silver halide color
        photog. material)
     211380-10-8P 211380-15-3P
IT
        (coupler contained in silver halide color
        photog. material)
IT
     939-79-7
        (coupler contained in silver halide color
        photog. material)
                                                   180200-97-9P
TΤ
     166522-39-0P
                    180200-92-4P
                                    180200-96-8P
                                                   211380-14-2P ·
     211380-11-9P
                    211380-12-0P
                                    211380-13-1P
     211380-16-4P
                    211380-17-5P 211380-18-6P
     211380-19-7P
        (coupler contained in silver halide color
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L26 ANSWER 9 OF 19 HCA COPYRIGHT 2003 ACS 129:168037 Silver halide color photographic

photog. material)

material, phenidone compounds used therefor, and process for preparing the same. Mikoshiba, Hisashi; Yoshioka, Yasuhiro; Soejima, Shin; Takahashi, Osamu; Saito, Naoki; Morigaki, Masakazu (Fuji Photo Film Co., Ltd., Japan). PCT Int. Appl. WO 9833760 Al 19980806, 162 pp. DESIGNATED STATES: W: CN, JP, US; RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1998-JP432 19980202. PRIORITY: JP 1997-20816 19970203; JP 1997-140719 19970529; JP 1997-195881 19970722.

AB

CN

Claimed is a silver halide color photog . material improved in the fastness of a color image, color reprodn., cyan stain, cyan color mixing at the time of processing, and the like by the combined use of a phenidone compd. having a particular structure, such as one represented by general formula (I; R4 = H, C1-30 alkyl, C6-20 aryl; R2a = C1-30 alkyl or alkenyl; R5 - R9 = H, alkyl, aryl, alkoxy, aryloxy, NH2, alkylamino, arylamino, acylamino, aminocarbonylamino, alkoxycarbonylamino, arylcarbonylamino, alkoxycarbonyl, aryloxycarbonyl, sulfonyl, sulfonylamino, halo, OH, CO2H, heterocyclyl, SO2NH2, CONH2, azo, alkylthio, arylthio, imido, sulfinyl, phosphonyl, acyl) and a pyrrolotriazole cyan coupler. The phenidone compds. I can be prepd. at a low cost on a com. scale by reacting an .alpha.-alkyl- or alkenylacrylic ester of formula R4HC:CR2aCO2R3 (R2a, R4 = same as above) with a phenylhydrazine compd. represented by general formula (II; R5 - R9 = same as above). Thus, a soln. of 74.04 mmol CH2:C(C16H33-n)CO2Me in toluene was dropwise to a stirred mixt. of 67.0 mmol phenylhydrazine and 73.7 mmol NaOMe at 100.degree. and the resulting mixt. was allowed to react at 100.degree. for 30 min to give I (R2a = C16H33-n, R4 - R9 = H) (III). A color photog . paper contq. III, a cyan coupler (IV), a hindered amine (V) showed cyan stain .DELTA.D of 0.01, good color reprodn., and 91% photostability (residual ratio).

IT 200049-65-6 211051-85-3

(silver halide color photog.

material contg. phenidone compds. and pyrrolotriazole cyan couplers)

RN 200049-65-6 HCA

1H-Pyrrolo[1,2-b] [1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

RN 211051-85-3 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxohexyl]amino]-4methylphenyl]-5-[[[bis(2-hydroxyethyl)amino]carbonyl]oxy]-6-cyano-,
2,6-bis(1,1-dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

IC 'ICM C07C069-533

S C07D231-08; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

color photog paper; Silver halide
color photog emulsion; fastness color image
improved; cyan stain color reprodn improved; pyrrolotriazole cyan
coupler; phenidone compd prepn; phenylhydrazine cyclocondensation
alkenylacrylic ester; alkylacrylic ester cyclocondensation
phenylhydrazine

IT Cyan couplers

Photographic couplers
Photographic emulsions

Ito, Takayuki;

```
Photographic paper
        (silver halide color photog.
       material contg. phenidone compds. and pyrrolotriazole cyan
        couplers)
                    211051-27-3P
                                   211051-31-9P
                                                  211051-36-4P
IT
    202483-63-4P
     211051-40-0P
                                                  211051-49-9P
                    211051-44-4P
                                   211051-47-7P
                    211051-54-6P
                                   211051-57-9P
                                                  211051-59-1P
     211051-52-4P
                                   211051-99-9P
                                                  211052-01-6P
                    211051-97-7P
     211051-96-6P
                                   211052-07-2P
                                                  211052-09-4P
                    211052-05-0P
     211052-03-8P
                                   211052-15-2P
                                                  211052-17-4P
                    211052-13-0P
     211052-11-8P
                                                  211052-25-4P
                    211052-21-0P
                                   211052-23-2P
     211052-19-6P
                                   211052-31-2P
                                                  211052-32-3P
     211052-27-6P
                    211052-29-8P
                                   211052-39-0P
                                                  211052-41-4P
                    211052-37-8P
     211052-35-6P
                                   361177-83-5P
                                                  361177-92-6P
                    232947-66-9P
     211052-43-6P
     361181-22-8P
        (silver halide color photog.
        material contg. phenidone compds. and pyrrolotriazole cyan
        couplers)
                 122586-52-1
                               122616-76-6
                                             158779-09-0
                                                           200216-42-8
     2516-92-9
IT
                                               211052-45-8
                                                             211052-47-0
                   200216-55-3
                                 200357-97-7
     200216-44-0
                                                             211052-62-9
                                               211052-60-7
                                 211052-58-3
                   211052-54-9
     211052-51-6
     211052-64-1
                   211102-31-7
        (silver halide color photog.
        material contg. phenidone compds. and pyrrolotriazole cyan
        couplers)
                                               184947-09-9
                                                             188745-52-0
                                 184773-62-4
                   179330-29-1
IT
     153273-52-0
                                             200137-20-8
                               200110-90-3
     200049-63-4 200049-65-6
                                                             211051-76-2
                                 211051-70-6
                                               211051-73-9
     200137-21-9
                   200137-23-1
                   211051-92-2
                                 211051-94-4
     211051-85-3
        (silver halide color photog.
        material contg. phenidone compds. and pyrrolotriazole cyan
        couplers)
                                        95-92-1, Diethyl oxalate
     50-00-0, Formaldehyde, reactions
IT
                                108-59-8, Dimethyl malonate
                                                                112-61-8,
     100-63-0, Phenylhydrazine
                            112-82-3, 1-Bromohexadecane
     Methyl octadecanoate
                        554-84-7, 3-Nitrophenol
                                                  628-97-7, Ethyl
     Dimethyl oxalate
                                1590-53-0, 3-(n-
                     759-65-9
     hexadecanoate
     Hexadecyloxy) phenylhydrazine hydrochloride
                                                  1806-72-0
                                                               23130-42-9,
     Dimethyl n-hexadecylmalonate 53633-31-1, n-Hexadecylmalonic acid
                        211052-72-1, 3-(n-Hexadecyloxy)aniline
     monomethyl ester
     hydrochloride
        (silver halide color photog.
        material contg. phenidone compds. and pyrrolotriazole cyan
        couplers)
                                  211052-69-6P
                   123633-21-6P
     53633-32-2P
IT
        (silver halide color photog.
        material contg. phenidone compds. and pyrrolotriazole cyan
        couplers)
    ANSWER 10 OF 19 HCA COPYRIGHT 2003 ACS
L26
129:87954 Silver halide color photographic
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material containing pyrrolotriazole cyan coupler.

Matsuoka, Mitsuyuki; Shimada, Yasuhiro; Shimura, Yoshio; Matsuda, Naoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10142759 A2 19980529 Heisei, 41 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-304415 19961115.

GI

$$R^1$$
 R^2
 R^3_m
 R^4_n
 R^4_n

ΑB The color photog. material has .gtoreq.1 layer contg. a pyrrolotriazole coupler I [R1, R2 = electron-withdrawing group with Hammett's .sigma..rho. 0.2-1.0; R3 = NHCOR31, NHSO2R32, CONHR33; R31 = H, alkyl, aryl, heterocycle, alkyloxy, aryloxy; R32, R33 = alkyl, aryl, heterocycle; R4 = substituent; n = 0 - (5-m); m = 2-5; X = H, leaving group to be released by the coupling reaction with the oxidized developing agent] on a support. The coupler has good developability even at low solvent ratio and good stability from leuco cyan dye problem. The photog. material incorporating the coupler has consistent color reprodn. quality. Preferable application of the coupler is to multilayer color reversal films. Suitable couplers are I [R1 = CN, R2 = 2,6-dibutyl-4-methyl-phenoxycarbonyl, R3 = 2,5-di(octyloxy-5-hydroxyphenylsulfoamino), R4 = 4-Me]. IT

209341-85-5

(cyan coupler; silver halide color photog. material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye) RN 209341-85-5 HCA 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, CN 2-[3,5-bis[[[4-(hexyloxy)phenyl]sulfonyl]amino]-4-methylphenyl]-6cyano-5-[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

$$Me - (CH_2)_5 = 0$$

$$H_2C = CH - CH_2 0$$

$$H_2C = CH - CH_2 - N - C = 0$$

$$t - Bu$$

$$O = S = 0$$

$$NH$$

$$NH$$

$$NH = 0$$

PAGE 1-B

- (CH₂)₅-Me

RN

IT 209341-82-2P

(cyan coupler; silver halide color
photog. material contg. pyrrolotriazole cyan coupler to
improve color developability and safety from leuco cyan dye)
209341-82-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[(2-chlorophenyl)sulfonyl]amino]-5-[(2,5-dichlorophenyl)sulfonyl]amino]-4-methylphenyl]-6-cyano-5-[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Cl} \\ \text{Cl} \\ \text{O} = \text{S} = \text{O} \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 \text{ O} \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} - \text{C} - \text{O} \\ \text{t-Bu} \\ \text{O} = \text{C} \\ \text{NC} \\ \text{NH} \\ \text{NH} \\ \text{NH} \\ \text{O} = \text{C} \\ \text{NH} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{NH} \\ \text{O} \\$$

IC ICM G03C007-38

ICS G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST. pyrrolotriazole cyan coupler color **photog** material; triazole cyan coupler color **photog** material; chromogenic development acetanilide coupler color **photog**

IT Photographic films

(color, reversal; silver halide color

photog. material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)

IT Photographic films

(color; silver halide color photog.

material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)

IT Cyan couplers

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)

IT 209341-89-9P 209341-96-8P

(bromination of; silver halide color

photog. material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)

IT 209341-83-3 209341-84-4 **209341-85-5**

(cyan coupler; silver halide color

photog. material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)

IT 209341-81-1P 209341-82-2P

(cyan coupler; silver halide color

photog. material contg. pyrrolotriazole cyan coupler to

improve color developability and safety from leuco cyan dye)
IT 209341-93-5P

(redn. of; silver halide color photog

. material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)

IT 5402-73-3P, 2,5-Dichlorobenzenesulfonyl chloride 209341-86-6P 209341-87-7P 209341-88-8P 209341-91-3P 209341-94-6P 209341-95-7P 209341-97-9P

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)

IT 302-01-2, Hydrazine, reactions 5400-86-2 27317-59-5 163119-16-2 209341-92-4

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)

L26 ANSWER 11 OF 19 HCA COPYRIGHT 2003 ACS 129:10563 Silver halide color photographic

photosensitive material and **image** forming method using same. Kawai, Kiyoshi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10097040 A2 **19980414** Heisei, 51 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-158764 19970616. PRIORITY: JP 1996-154622 19960614.

GI

The photog. material comprises at least three different silver halide emulsion layers having different color sensitivity among them, and a hydrophilic colloidal layer, wherein the cyan coupler silver halide emulsion layer comprises pigment forming coupler I (R1-5 = H, substituent; Z = ring forming non metal element group; X = heterocyclic, substituted amino group, aryl; Y = H, substituent; R6 = substituent). At least one of the photosensitive layer contg. the cyan coupler comprises .gtoreq.80 % silver halide salt and the silver halide salt is a tabular silver halide particle having (100) main face.

The **photog**. photosensitive material provides the rapid processing speed, a sharp **image**, and the improved dependency on the **photog**. material treatment, and is used for scanning exposition by a semiconductor laser beam. 200049-64-5 200049-65-6

(pigment forming coupler for silver halide color photog. photosensitive material)

RN 200049-64-5 HCA CN 1H-Pyrrolo[1,2-b]

IT

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Me
$$C-CH_2-CMe_3$$
 $O-(CH_2)_7-Me$

RN 200049-65-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

Me- (CH₂)₅
O
$$t$$
-Bu
Bu-t
Me- (CH₂)₇-CH-C-NH
Me
 C
 C
 C
 C
 C
 C
 C

IC ICM G03C007-38

ICS G03C001-035; G03C001-83; G03C005-08; G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog
photosensitive material; cyan coupler silver
halide emulsion

IT Cyan couplers

Photographic emulsions (silver halide color photog.

photosensitive material and image forming method using same) 188745-52-0 200049-64-5 200049-65-6 ΙT (pigment forming coupler for silver halide color **photog**. photosensitive material) ANSWER 12 OF 19 HCA COPYRIGHT 2003 ACS L26 128:277020 Silver halide color photographic material containing a pyrroloazole polymer cyan coupler. Mizukawa, Hiroki; Shimada, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Kokai Tokkyo Koho JP 10078640 A2 19980324 Heisei, 62 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-250856 19960903. Claimed color photog. material contain (1) a polymer AB comprising a coupler monomer CH2:CR1(L1)i(L2)jQ (R1 = H, alkyl, aryl, Cl; L1 = CONR2, CO, NR2C(:O), OC(:O), etc; R2 = H, alkyl, aryl,heterocyclic group; L2 = bivalent linkage; i, j = 0, 1; Q = pyrroloazole moiety), and (2) a polymer comprising a monomer having no coupling capability. The compd. is a cyan coupler with good developability, providing images with good spectral characteristics and good image stability. Thus, a polymer coupler prepd. from 2-acrylaminophenyl-5-morpholinocarbonyloxy-6cyano-7-(4-methyl-2,4-di-tert-butyl-1-cyclohexyl)pyrrolotriazole and Bu acrylate was successfully used for a multilayer color neg. film. 205505-01-7 205505-02-8 205505-04-0 IT 205505-08-4 205505-17-5 205505-19-7 205505-21-1 205505-28-8 205505-29-9 (coupler; color photog. material contg. pyrroloazole polymer cyan coupler for developability and color reprodn. quality) 205505-01-7 HCA RN1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, CN 6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester, polymer with ethyl 2-propenoate (9CI) INDEX NAME) CM 1 CRN 205505-00-6

C38 H50 N6 O6

CMF

CM 2

CRN 140-88-5 CMF C5 H8 O2

205505-02-8 HCA RN CN

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester, polymer with butyl 2-propenoate (9CI) INDEX NAME)

CM 1

CRN 205505-00-6 CMF C38 H50 N6 O6

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} = \text{CH}_2 \end{array}$$

RN 205505-04-0 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[bis(2-cyanoethyl)amino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[(1-oxo-2-propenyl)amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 205505-03-9 CMF C39 H48 N8 O5

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} \end{array}$$

RN 205505-08-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[(1-oxo-2-propenyl)amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 1-methylethyl ester, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 205505-07-3 CMF C25 H26 N6 O6

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} = \text{CH}_2 \end{array}$$

RN 205505-17-5 HCA

CN Glycine, N-(1-oxo-2-propenyl)-, 2,2,6,6-tetramethyl-1-(1-methylethoxy)-4-piperidinyl ester, polymer with 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl 6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-1H-pyrrolo[1,2-b][1,2,4]triazole-7-carboxylate and butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 205505-16-4 CMF C17 H30 N2 O4

CM 2

CRN 205505-00-6 CMF C38 H50 N6 O6

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH------} \text{CH}_2 \end{array}$$

RN 205505-19-7 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester, polymer with butyl 2-propenoate and
N-[2-[4-(1,1-dioxido-4-thiomorpholinyl)phenoxy]ethyl]-2-methyl-2propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 205505-18-6 CMF C16 H22 N2 O4 S

$$\begin{array}{c|c} O & CH_2 \\ \hline O & CH_2 - CH_2 - NH - C - C - Me \end{array}$$

CRN 205505-00-6 CMF C38 H50 N6 O6

CM 3

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} \end{array} \text{CH}_2$$

RN 205505-21-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester, polymer with N-[5-(aminosulfonyl)-2chlorophenyl]-2-methyl-2-propenamide, butyl 2-propenoate and N-[2-[4-(1,1-dioxido-4-thiomorpholinyl)phenoxy]ethyl]-2-methyl-2propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 205505-20-0

CMF C10 H11 Cl N2 O3 S

$$\begin{array}{c|c} C1 & O & CH_2 \\ \parallel & \parallel \\ NH-C-C-Me \\ \hline \\ O = S-NH_2 \\ \parallel & \\ O \end{array}$$

CRN 205505-18-6 CMF C16 H22 N2 O4 S

$$\begin{array}{c|c} O & CH_2 \\ \hline O & CH_2 - CH_2 - NH - C - C - Me \end{array}$$

CM 3

CRN 205505-00-6 CMF C38 H50 N6 O6

```
CM
     CRN 141-32-2
     CMF
          C7 H12 O2
       0
n-BuO-C-CH=CH_2
     205505-28-8 HCA
RN
     1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
CN
     6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-
     [(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-
     methylcyclohexyl ester, telomer with butyl 2-propenoate and
     1-dodecanethiol (9CI) (CA INDEX NAME)
     CM
     CRN
         112-55-0
     CMF C12 H26 S
^{\rm HS-} (CH<sub>2</sub>)<sub>11</sub>-Me
     CM
     CRN
          205505-02-8
          (C38 H50 N6 O6 . C7 H12 O2)x
     CMF'
     CCI
          PMS
          CM
                3
          CRN
                205505-00-6
          CMF C38 H50 N6 O6
```

CRN 141-32-2 CMF C7 H12 O2

RN 205505-29-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester, polymer with 2-[(2-methyl-1-oxo-2propenyl)oxy]ethyl 3-oxobutanoate (9CI) (CA INDEX NAME)

CM 1

CRN 205505-00-6 CMF C38 H50 N6 O6

CRN 21282-97-3 CMF C10 H14 O5

IC ICM G03C007-327

ICS G03C001-00; G03C007-00; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

polymer cyan coupler pyrrolotriazole photog; pyrroloazole ST cyan coupler photog material; acrylamide polymer cyan coupler photog; methacrylamide polymer cyan coupler photog

IT Cyan couplers

(color photog. material contg. pyrroloazole polymer cyan coupler for developability and color reprodn. quality)

IT Photographic films

(color; color photog. material contg. pyrroloazole polymer cyan coupler for developability and color reprodn. quality)

205504-96-7 205504-98-9 205504-99-0 IT 205504-94-5 205504-95-6 205505-01-7 205505-02-8 205505-04-0

205505-06-2 **205505-08-4**

205505-10-8 205505-12-0

205505-15-3 205505-17-5 205505-19-7 205505-13-1

205505-27-7 205505-21-1 205505-23-3 205505-25-5

205505-28-8 205505-29-9

(coupler; color **photog**. material contg. pyrroloazole polymer cyan coupler for developability and color reprodn. quality)

L26 ANSWER 13 OF 19 HCA COPYRIGHT 2003 ACS

128:68441 Silver halide color photographic

material using novel coupler. Shimada, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09292679 A2 19971111 Heisei, 38 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-131245 19960426.

GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB The title material contains, in .gtoreq.1 layer on the support, .gtoreq.1 coupler I (R1, R2 = aliph. group; R3, R4, Y = H or substituent; X = heterocycle, substituted amino, aryl). A color photog. film using II gave high color quality images with good lightfastness.
- IT 200111-38-2 200111-46-2

(triazole deriv. photog. cyan coupler)

RN 200111-38-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-2-[[[5-octyl-2-(1,1,3,3tetramethylbutoxy)phenyl]sulfonyl]amino]phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylphenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

$$\begin{array}{c} \text{Me} \\ | \\ \text{Me}_3\text{C--CH}_2\text{--C--O} \\ | & | \\ \text{Me} & _R \end{array}$$

RN 200111-46-2 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-5-[[(di-2-propenylamino)carbonyl]oxy]-2-[2-methyl-3-[[[5-octyl-2-(1,1,3,3-tetramethylbutoxy)phenyl]sulfonyl]amino]phenyl]-,
2,6-bis(1,1-dimethylethyl)-4-ethylphenyl ester (9CI) (CA INDEX NAME)

- IC ICM G03C007-38
 - ICS C07D487-04; G03C007-00
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST triazole deriv photog cyan coupler
- IT Cyan couplers

(triazole deriv. photog. cyan coupler)

IT 200111-47-3P

(bromination of; prepn. of triazole deriv. photog. cyan coupler)

IT 200111-48-4P 200111-49-5P

(prepn. of triazole deriv. photog. cyan coupler)

IT 105-34-0, Methyl cyanoacetate 128-37-0, 2,6-Di-tert-butyl-4-methylphenol, reactions 15159-40-7, Morpholinocarbonyl chloride 25761-72-2, Diallylcarbamoyl chloride 155049-60-8, 1H-1,2,4-Triazole-3-acetic acid

(prepn. of triazole deriv. photog. cyan coupler)

IT 191274-16-5 **200111-38-2** 200111-39-3 200111-40-6 200111-41-7 200111-42-8 200111-43-9 200111-44-0

200111-46-2 (triazole deriv. photog. cyan coupler)

IT 200111-37-1P 200111-45-1P

(triazole deriv. photog. cyan coupler)

L26 ANSWER 14 OF 19 HCA COPYRIGHT 2003 ACS

128:68435 Silver halide color photographic

material containing pyrrolotriazole cyan coupler and arylsulfonamide. Mikoshiba, Hisashi; Yoneyama, Hiroyuki; Morigaki, Masakazu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09288338 A2 19971104 Heisei, 70 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-126414 19960423.

GI

The material contains a pyrrolotriazole cyan coupler I [R1-5 = H, substituent; Z = (substituted) nonmetal at. group required to form ring; X = H, substituent; R6 = H, substituent] and an (un)substituted arylsulfonamide. The material shows improved color reprodn. quality and gives light-resistant images.

Ι

IT 200049-64-5 200049-65-6

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler and arylsulfonamide) RN 200049-64-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Me
$$C-CH_2-CMe_3$$
 $O-(CH_2)_7-Me$

RN 200049-65-6 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-

methylcyclohexyl ester (9CI) (CA INDEX NAME)

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IC ICM G03C007-38
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ICS G03C007-00; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 28

ST pyrrolotriazole cyan coupler **photog** material; arylsulfonamide **photog** material cyan coupler

IT Cyan couplers

IT

Photographic films

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler and arylsulfonamide)

178743-91-4 184947-09-9 200049-64-5 200049-65-6

200110-90-3 200110-96-9 200137-20-8 200137-21-9 200137-23-1

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler and arylsulfonamide) 184773-63-5 IT 109357-84-8 117490-80-9 136664-63-6 163300-34-3 200137-30-0 200137-31-1 200137-32-2 200137-33-3 184773-64-6 200137-37-7 200137-38-8 200137-35-5 200137-36-6 200137-34-4 200137-43-5 200137-44-6 200137-41-3 200137-40-2 200137-39-9 200198-79-4

200137-45-7 200137-51-5 200 (silver halide color photog.

material contg. pyrrolotriazole cyan coupler and arylsulfonamide)
IT 188745-52-0P

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler and arylsulfonamide)

IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler and arylsulfonamide)
IT 105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl
chloride 163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol
194419-32-4

(silver halide color photog.

material contg. pyrrolotriazole cyan coupler and arylsulfonamide)

L26 ANSWER 15 OF 19 HCA COPYRIGHT 2003 ACS

128:68434 Silver halide color photographic

material with improved color reproduction quality and storage stability. Takada, Kiyoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09288336 A2 19971104 Heisei, 41 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-101555 19960423.

GΙ

NC
$$CO_2$$
 Z R^2 R^4 R^6 R^6

The material has .gtoreq.1 photosensitive Ag
halide emulsion layer contg. .gtoreq.1 coupler I [R1-5 = H,
substituent; Z = (substituted) nonmetal at. group required to form
ring; X = heterocycle; (substituted) amino, aryl; Y = H,
substituent; R6 = substituent] and AgI-free Ag(Br,Cl) or
AgCl particles (AgCl content .gtoreq.98 mol%)
sensitized with a Au compd. The material shows improved color
reprodn. quality and storage stability.

IT 7783-90-6, Silver chloride, uses

(content-controlled; silver halide color

photog. material contg. cyan coupler for improved color reprodn. quality)

RN 7783-90-6 HCA

CN Silver chloride (AgCl) (9CI) (CA INDEX NAME)

Ag-Cl

IT 200049-64-5 200049-65-6

(silver halide color photog.

material contg. cyan coupler for improved color reprodn. quality)

RN 200049-64-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Me
$$C-CH_2-CMe_3$$
 $O-(CH_2)_7-Me$

RN 200049-65-6 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

Me

material contg. cyan coupler for improved color reprodn. quality)

194419-31-3P

material contg. cyan coupler for improved color reprodn. quality)

163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol

105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl

194419-30-2P

(silver halide color photog.

IT

IT

190436-30-7P

chloride

200049-66-7P

194419-32-4

(silver halide color photog.

material contg. cyan coupler for improved color reprodn. quality)

L26 ANSWER 16 OF 19 HCA COPYRIGHT 2003 ACS

128:68432 Silver halide color photographic

material containing phenolic and pyrrolotriazole cyan couplers. Yoneyama, Hiroyuki; Mikoshiba, Hisashi; Morigaki, Masakazu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09288337 A2 19971104 Heisei, 75 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-101556 19960423.

GI

AB Claimed color **photog**. material has .gtoreq.1 cyan dye-developing **Ag halide** emulsion layer contg.

(1) a cyan coupler I (R1-5 = H, substituent; Z = non-metal ring; X = heterocyclic group, amino aryl; R6 = substituent; Y = H, substituent) and (2) a phenolic coupler II (R11 = aliph., arom. or heterocyclic group, amino; X11 = H, halo, alkoxy, acylamino; R12 = alkyl, acylamino; R12 = and X11 may be combined to form a 5-, 6- or 7-membered ring; Z = H, leaving group to be released by the coupling reaction with the oxidized developing agent), where the added ratio of coupler II/coupler I is 60 mol% or less. It has good color reprodn. quality, good dye stability and is insensitive to the processing fluctuation. Thus, in a multilayer color paper, coupler I (R1-5 and Z = 2,6-di-tert.-butyl-4-methylcyclohexyl; R6 = 4-tert.-butylphenyl; Y = H; X = morpholine-4-yl) and coupler II (n-pentadecylcarbonylamino-4,6-di-chloro-5-ethylphenol) were utilized to provide the mentioned advantages.

IT 200049-64-5 200049-65-6

(color **photog**. material contg. phenolic and pyrrolotriazole cyan couplers to improve color reprodn. quality and dye stability)

RN 200049-64-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 200049-65-6 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C001-00; G03C007-00; G03C007-34; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrroloazole cyan coupler **photog** material; phenol cyan coupler **photog** material; acylaminophenol cyan coupler **photog** material; carbamoylphenol cyan coupler **photog** material

IT Cyan couplers

(color **photog**. material contg. phenolic and pyrrolotriazole cyan couplers to improve color reprodn. quality and dye stability)

IT 20364-09-4 31037-84-0 88725-29-5 92589-17-8 93951-12-3 96758-05-3 99141-89-6 110968-12-2 117827-06-2 178743-91-4 179330-32-6 200049-64-5 200049-65-6

200110-89-0 200110-90-3 200110-91-4 200110-96-9

(color **photog**. material contg. phenolic and

pyrrolotriazole cyan couplers to improve color reprodn. quality and dye stability)

IT 188745-52-0P

(color **photog**. material contg. phenolic and pyrrolotriazole cyan couplers to improve color reprodn. quality and dye stability)

IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P (for color photog. material)

IT 105-34-0, Methyl cyanoacetate 407-25-0, Hexafluoroacetic anhydride 15159-40-7, 4-Morpholinecarbonyl chloride 163119-16-2 194419-32-4

(pyrrolotriazole cyan coupler from; for color **photog**. material)

L26 ANSWER 17 OF 19 HCA COPYRIGHT 2003 ACS

127:197698 Silver halide color light-sensitive

material containing a polymer coupler and method of making a color

filter using it. Igarashi, Tatsuya; Mizukawa, Hiroki; Hirai, Hiroyuki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09204027 A2 19970805 Heisei, 48 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-316864 19961114. PRIORITY: JP 1995-326252 19951122.

GΙ

$$Q^{3} = Q^{2}$$

$$Q^{4} = NCO$$

$$(R^{4})_{m}$$

$$Q^{5} = NSO_{2}$$

$$(R^{4})_{m}$$

The title light-sensitive material contains at least one polymer AB coupler selected from (1) a copolymer of at least one magenta coupler monomer of formula Q1-(L2)j-(L1)i-C(R1):CH2 (I; R1 = H, Cl, alkyl, aryl; L1 = CONR2, CO2, NR2CO, O2C, Q3, Q4, Q5; wherein R4 = substituent; R5 = same as R2; m = 0-4; R2 = H, alkyl, aryl, heterocyclyl; L2 = bivalent linkage group linking L1 and Q1; i, j = 0,1; Q1 = magenta coupler residue forming a magenta dye upon coupling with the oxidized form of an arom. primary amine developer) and at least one cyan coupler of formula Q2-(L4)h-(L3)g-C(R3):CH2 (II; R3, L3, L4, and g are same as described in R1, L1, L2, and i, resp.; Q2 = cyan coupler residue forming a cyan dye upon coupling with the oxidized form of an arom. primary amine developer) or (2) a copolymer of a magenta coupler I, a cyan coupler II, and a noncoloring monomer contg. at least one ethylene group which does not have capability of coupling with the oxidized form of an arom. primary amine developer. In a silver halide color light-sensitive material possessing at least three silver halide emulsion layers each having different color sensitivity on a support, each silver halide emulsion layer contains a combination of couplers coloring blue, green, or red upon reaction with the oxidized form of an arom. primary amine developer. Besides these three silver emulsion layers, it also possesses at least another silver

halide emulsion layer of sep. color sensitivity contg. a coupler color-compensating substantially black of transmittance d. .gtoreq.2.5 when all the couplers on the support are reacted. A color filter possessing blue, green, and red pixels is manufd. by pattern exposure of above silver halide light-sensitive material followed by color development and desilverization. This light-sensitive material and can form blue images excellent in spectral transmission property and thermal and light stability and is suitable for making a color filter thin in thickness, excellent in planarity and light and thermal stability, and also possessing black part of high d.

IT 194280-71-2P

CN

(silver halide color light-sensitive material contg. polymer coupler and method of making color filter using it)

RN 194280-71-2 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[(diethylamino)carbonyl]oxy]-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-, 2,4,6-tris(1,1-dimethylethyl)cyclohexyl ester, polymer with butyl 2-propenoate and N-[4-[7-chloro-6-(1,1-dimethylethyl)-1H-pyrazolo[1,5-b][1,2,4]triazol-2-yl]phenyl]-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 194280-70-1 CMF C41 H58 N6 O5

CM 2

CRN 189814-79-7 CMF C18 H20 Cl N5 O

it)

127:25872 Silver halide color photographic

material containing pyrrolotriazole derivative cyan coupler. Ito, Takayuki; Matsuda, Naoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09080712 A2 19970328 Heisei, 58 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-258335 19950912.

GI

$$\begin{array}{c|c} R^1 & R^2 \\ \hline EDT_n & NG \\ \hline Z_p^{\scriptscriptstyle \text{\tiny I}} Z_q & I \end{array}$$

The **photog**. material comprises a support coated with .gtoreq.1 layer contg. a pyrrolotriazole deriv. cyan coupler I (Zp, Zq = CR3:, N:; Zp .noteq. Zq; R1, R2 = electron-withdrawing group with Hammett's .sigma.p value 0.2-1.0; R3 = substituent; T = releasable connecting group by coupling with oxidant of color developer followed by releasing ED; n = 0, 1; ED = redox-reactive group with oxidant of color developer by releasing from T; G = H, releasable blocking group at development). The material shows good graininess.

IT 189883-45-2 189883-48-5

(silver halide color photog.

material contg. pyrrolotriazole deriv. cyan coupler showing good graininess)

RN 189883-45-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxooctyl]amino]-4hydroxyphenyl]methylamino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[[[2(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl], 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA
INDEX NAME)

PAGE 1-A

PAGE 1-B

```
- CH<sub>2</sub>- CMe<sub>3</sub>
```

```
- (CH<sub>2</sub>)<sub>7</sub>-Me
```

```
RN 189883-48-5 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-5-[[[(4-hydroxy-2,5-dioctylphenyl)methylamino]carbonyl]oxy]-
2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-
tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-,
2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)
```

$$\begin{array}{c} \text{OH} \\ \text{Me-} (\text{CH}_2) \text{ } 7-\text{Me} \\ \\ \text{N-Me} \\ \\ \text{O} \\ \\ \text{NC} \\ \text{O} \\ \\ \text{NC} \\ \text{NN} \\ \\ \text{NH} \\ \\ \text{NH} \\ \\ \text{S} \\ \\ \text{O} \\ \text{O} \\ \text{CH}_2) \text{ } 7-\text{Me} \\ \\ \text{Me} \\ \\ \text{O} \\ \text{C} \\ \text{CH}_2 - \text{CMe}_3 \\ \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{C} \\ \text{CH}_2 - \text{CMe}_3 \\ \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{C} \\ \text{CH}_2) \text{ } 7-\text{Me} \\ \\ \text{Me} \\ \text{O} \\ \text{O}$$

IC ICM G03C007-38 ICS G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrrolo triazole cyan coupler color **photog**; graininess color **photog** film pyrrolotriazole coupler

IT Photographic films

(color; silver halide color photog.

material contg. pyrrolotriazole deriv. cyan coupler showing good graininess)

IT Cyan couplers

(silver halide color photog.

material contg. pyrrolotriazole deriv. cyan coupler showing good graininess)

IT 189883-40-7 189883-41-8 189883-42-9 189883-43-0 189883-44-1 189883-45-2 189883-46-3 189883-47-4 189883-48-5

(silver halide color photog.

material contg. pyrrolotriazole deriv. cyan coupler showing good graininess)

IT 189883-53-2P

(silver halide color photog.

material contg. pyrrolotriazole deriv. cyan coupler showing good graininess)

IT 189883-50-9P 189883-52-1P

(silver halide color photog.

material contg. pyrrolotriazole deriv. cyan coupler showing good graininess)

IT 503-38-8, Trichloromethyl chloroformate 189883-49-6 189883-51-0 (silver halide color photog.

material contg. pyrrolotriazole deriv. cyan coupler showing good graininess)

L26 ANSWER 19 OF 19 HCA COPYRIGHT 2003 ACS 125:342738 Silver halide color photographic

material containing pyrroloazole cyan couplers and image formation method. Ozawa, Takashi; Shimada, Yasuhiro; Ito, Takayuki (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08227127 A2 19960903 Heisei, 50 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-56820 19950222.

GΙ

The material comprises a support having thereon .gtoreq.1 the title coupler I [Zb = CR6: when Za = N: or Zb = N: when Za = CR6:; R1-5 = H, substituent; R6 = substituent; Z = (un)substituted nonmetallic at. group to form a ring; X = (un)substituted amino, aryl, heterocyclyl] and .gtoreq.1 non-color-forming diffusion-resistant X1NR5(G)mR2 [II; X1 = NR1R3, OR4; R1 = H, aliph. group, aryl, heterocyclyl; R3-4 = H, aliph. group, aryl, heterocyclyl, cyano, NO2, hydrazino; NR1R3 may be a heterocyclic ring; R5 = H, alkyl, group eliminated under an alk. condition; G = CO, SO2, SO, CONR6, CO2, SO 2NR7, POR8, C(:S), iminomethylene; R6-7 = H, alkyl, aryl; R8 = alkyl, aryl; m = 0-2; II may form oligomers or polymers by linking at the site of R1, R2, or R5]. A method for the image formation by imagewise exposure of the material, followed by black-and-white processing and treatment with a developer with pH .gtoreq.1 is also claimed. The material provides lightfast images with good color reproducibility.

IT 183744-83-4

(photog. material contg. pyrroloazole cyan couplers and diffusion-resistant compds.)

RN 183744-83-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[(di-2-propenylamino)carbonyl]oxy]-2-[5-(1-ethylpentyl)-2-methoxyphenyl]-, 1,2,2,6,6-pentamethylcyclohexyl ester (9CI) (CA INDEX NAME)

183744-90-3

couplers and diffusion-resistant compds.)

IT Photographic couplers
(cyan, photog. material contg. pyrroloazole cyan

couplers and diffusion-resistant compds.)
IT 183744-82-3 183744-83-4 183744-84-5 183744-85-6
183744-86-7 183744-87-8 183744-88-9 183744-89-0

183744-91-4 183744-92-5

(photog. material contg. pyrroloazole cyan couplers and diffusion-resistant compds.)

IT 125818-41-9 139611-57-7 153304-02-0 153304-09-7 153526-32-0 183744-94-7 183744-95-8 183744-97-0 183744-98-1

(color, photog. material contg. pyrroloazole cyan

(photog. material contg. pyrroloazole cyan couplers and diffusion-resistant compds.)

IT 178743-95-8P

(photog. material contg. pyrroloazole cyan couplers and diffusion-resistant compds.)

IT 178743-91-4P

(prepn. of pyrroloazole cyan coupler for **photog**. material contg. diffusion-resistant compds.)

IT 178744-15-5P 178744-16-6P 178744-17-7P 178744-18-8P 178744-19-9P

(prepn. of pyrroloazole cyan coupler for **photog**. material contg. diffusion-resistant compds.)

IT 105-34-0, Methyl cyanoacetate 111-94-4 15159-40-7, Morpholinocarbonyl chloride 68006-66-6 163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol 178744-14-4

(prepn. of pyrroloazole cyan coupler for **photog**. material contg. diffusion-resistant compds.)

=> d 125 1-39 cbib abs fhitstr hitind

L25 ANSWER 1 OF 39 HCA COPYRIGHT 2003 ACS

134:63788 Silver halide color photographic

material. Yoneyama, Hiroyuki; Yoshioka, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000352805 A2 20001219, 79 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-164452 19990610.

GΙ

AB In the title full color **photog**. material, the **photog**. paper support is coated with biaxially drawn microporous polyolefin film and the **photog**. emulsion layer contains a pyrazolotriazole magenta **coupler** represented by a general formula I (R1, R2 = H, substituent; X = H, **coupling** group).

IT 188745-52-0P

(pyrrolotriazole cyan coupler in color photog. paper showing excellent photog. properties)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38 ICS G03C001-30; G03C001-79; G03C007-388; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog paper pyrazolotriazole magnet coupler; polyolefin coated photog paper hardening agent pyrrolotriazole cyan coupler

IT Color photographic paper

Magenta couplers

(color **photog**. paper contg. pyrazolotriazole magenta **coupler**)

IT Cyan couplers

IT

Photographic hardening agents

(color **photog**. paper contg. pyrazolotriazole magenta **coupler** and)

IT 9003-07-0, Polypropylene

(biaxially drawn microporous polyolefin layer on **photog** . paper support)

IT 3278-22-6, Di(vinylsulfonyl)methane

(hardening agent in color **photog**. paper showing excellent **photog**. properties)

IT 105-34-0, Methyl cyanoacetate 7726-95-6, Bromine, reactions 15159-40-7, 4-Morpholinocarbonyl chloride 163119-16-2,

2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4

(prepn. of pyrrolotriazole cyan coupler for

photog. color paper)

IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P (prepn. of pyrrolotriazole cyan coupler for

photog. color paper)
131169-88-5 152827-98-0

(pyrazolotriazole magenta coupler in color

L25 ANSWER 2 OF 39 HCA COPYRIGHT 2003 ACS 134:23436 Silver halide color photographic

material and color **image** formation. Yoneyama, Hiroyuki; Deguchi, Yasuaki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000330238 A2 **20001130**, 65 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-141966 19990521.

In the title **photog**. material possessing .qtoreq.3 Ag halide emulsion layers which are different in color sensitivity and contain a Ag halide emulsion comprising Ag halide emulsion grains having a AgCl content of .gtoreq.95 mol% on a reflective support, (i) the support is a water-resistant resin-coated support and .gtoreq.1 of the water-resistant resin layers between the support and the emulsion layer is a biaxially oriented polyolefin layer having fine pores, (ii) a polyolefin layer having no fine pore is formed between the above polyolefin layer and the emulsion layer in addn. to condition (i) or (iii) the support is obtained by coating a mixt. of a resin contg. .gtoreq.50 wt.% polyester formed by polycondensation of dicarboxylic acids with diols and a white pigment on at least the side to be coated with the emulsion. material is developed following scanning exposure using an optical beam modulated on the basis of image information or is processed for .ltoreq.20 s in color development time to form color The material shows improved applicability to rapid processing and storage stability before use.

IT 188745-52-0

AB

(silver chloride-rich photog. emulsion contg. triazole deriv. magenta or cyan coupler)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

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ICM G03C001-79
IC
     ICS G03C001-035; G03C005-08; G03C007-00; G03C007-38; G03C007-407
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
    photog paper water resistant coating polyolefin; polyester
ST
    photog paper pigment; cyan magenta photog
    coupler
IT
    Photographic paper
        (photog. paper having water resistant resin coating)
IT
     Polyesters, uses
        (photog. paper having water resistant resin coating)
IT
    Photographic couplers
       Photographic emulsions
        (silver chloride-rich photog.
        emulsion contq. triazole deriv. magenta or cyan
        coupler)
     9002-88-4, Polyethylene 9003-07-0, Polypropylene
                                                          13463-67-7,
IT
     Titania, uses
                     25038-59-9, Poly(ethylene terephthalate), uses
        (photog. paper having water resistant resin coating)
                   131169-88-5 152827-98-0 188745-52-0
IT
     124351-77-5
     200049-62-3
        (silver chloride-rich photog.
```

emulsion contq. triazole deriv. magenta or cyan

L25 ANSWER 3 OF 39 HCA COPYRIGHT 2003 ACS

133:342412 Silver halide photographic

coupler)

material using reflective support coated with polymer layer. Yamazaki, Isatada; Nakamura, Takeshi (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 2000305218 A2 20001102, 57 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-116541 19990423.

In the material comprising a reflective support composed of a base AB paper coated with resin layers on both sides and .gtoreq.1 Ag halide emulsion layer and .gtoreq.1 non-photosensitive hydrophilic colloidal layer, the resin layer on the emulsion layer side contains a biaxially drawn polymer layer (thickness 10-30 .mu.m) contg. .gtoreq.10 wt.% white pigments. In the material, (1) the total gelatin in the emulsion layer and the colloidal layer may be .ltoreq.6.5 g/m2, (2) .gtoreq.1 of the emulsion layer may contain .gtoreq.1 yellow coupler selected from I, II, and R21R22NCOCX3HCONHR23 (R1-2 = alkyl, cycloalkyl, aryl; R3 = H, halo, acylamino; X1-3 = releasing group by the reaction with developer oxide; R11 = monovalent substituent other than H; Q = nonmetal atoms to form 3-5-membered hydrocarbon ring or a heterocycle contg. N, S, O, or P; R12 = H, halo, alkyl, alkoxy, aryloxy, amino; R13 = substituent; R21-22 = alkyl, aryl, heterocycle; R23 = aryl, heterocycle; R21 and R22 may form a N-contg. heterocycle), or (3) .gtoreq.1 of the emulsion layer may contain .qtoreq.1 cyan coupler selected from III, IV, V, and VI (R41, R43, R46-47 = H, substituent; R42 = substituent; when m = 0, R41 = substituent with Hammett's .sigma.p .gtoreq.0.20; when m = .gtoreq.1, .gtoreq.1 of R41 and R42 is substituent with Hammett's .sigma.p .gtoreq.0.20; Z1, Z3 = nonmetal

atoms to form 5-membered N-contg. heterocycle; Z2 = nonmetal atoms to form 6-membered heterocycle which may be substituted or condensed with benzene ring; Z4 = nonmetal atoms to form 6-membered heterocycle; R44-45 = substituent with .sigma.p .gtoreq.0.20; X31-34 = releasing group by coupling reaction with developer oxide). The material shows good color reproducibility, pressure resistance, cutting property, and suited for rapid processing. 200137-20-8

(photog paper contg. amide compd. yellow
coupler and azole compd. cyan coupler
)

RN 200137-20-8 HCA

IT

CN

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1oxobutyl]amino]phenyl]-6-cyano-5-[[(diethylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C001-79 ICS G03C001-74; G03C007-36; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog paper polymer layer white pigment; coupler photog paper cyan yellow

IT Photographic couplers

(photog paper contg. amide compd. yellow coupler and azole compd cyan coupler)

IT Photographic paper

(photog. paper coated with biaxially drawn polymer contg. white pigment)

154021-59-7 151645-05-5 144916-81-4 150919-56-5 IT127983-19-1 172650-64-5 200137-20-8 170446-98-7 155218-20-5 303189-36-8 303189-34-6 267890-39-1 208345-82-8 256367-16-5 303189-38-0 303189-37-9

(photog paper contg. amide compd. yellow coupler and azole compd. cyan coupler

IT 9003-07-0, Polypropylene 9003-53-6, Polystyrene (photog. paper coated with biaxially drawn polymer contg. white pigment)

L25 ANSWER 4 OF 39 HCA COPYRIGHT 2003 ACS 133:215420 Silver halide color photographic

material with high sharpness. Takata, Kiyoto; Kimura, Keizo; Takahashi, Osamu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000241936 A2 20000908, 98 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-358018 19991216. PRIORITY: JP 1998-363003 19981221.

GI

$$\begin{bmatrix}
R^{2} & L^{1} - L^{2} = L^{3} \end{bmatrix}_{m} & R^{5} \\
0 & N & 0 \\
0 & R^{4}
\end{bmatrix} \qquad \begin{bmatrix}
I & M & N^{+} \\
I & M & N^{-}
\end{bmatrix}$$

The title **photog**. material, possessing .gtoreq.3 AB photosensitive hydrophilic colloid layers contg. each of yellow, magenta, and cyan dye-forming couplers and Ag halide emulsion grains different in color sensitivity from each other and .gtoreq.1 non-photosensitive hydrophilic colloid layers on a transparent support, contains a compd. I (R1, R4 = H, aliph., arom. or heterocyclic group, NR7R8, NR7CONR7R8, NR8COR9, NR8SO2R9; R2, R5 = H, aliph., arom. or heterocyclic group, CN, sulfo, NR7R8, NR8COR9, NR8SO2R9, NR7CONR7R8, CO2R7, CONR7R8, COR9, SO2R9, SO2NR7R8; R3, R6 = OR7, CO2R7, COR9, CONR7R8, NR7R8, NR8COR9, NR8SO2R9, NR7CONR7R8, SO2R9, SO2NR7R8, CN; R7, R8 = H, aliph. or arom. group; R9 = aliph. or arom. group, R7 and R8 or R8 and R9 may link each other to form a 5- or 6-membered ring; L1-3 = methine; m = 0-2; Mn+ = cation with n valence; n = 1-3) in 1 of these layers and a solid fine particle dispersion of a dye DXy (D = chromophore-contg. group; X = dissocg. H or a compd. having dissocq. H; y = 1-7) in .gtoreq.1 of the non-photosensitive layers and the pH value of the coating of the material is 4.6-6.4. material shows high sharpness and environmental stability upon exposure and is capable of simplifying the processing.

IT 184947-09-9P

(triazole deriv. photog. cyan coupler

RN 184947-09-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

```
IC
     ICM
         G03C001-83
          G03C001-035; G03C007-38
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     Section cross-reference(s): 41
ST
     photog film antihalation dye; solid dye dispersion
     photog film; triazole deriv cyan coupler
     photog
     Photographic films
IT
        (photog. film contg. antihalation dye and solid dye
        dispersion)
IT
     Cyan couplers
        (triazole deriv. photog. cyan coupler
IT
     93951-12-3
        (photog. cyan coupler;
        photog. film contg. antihalation dye and solid dye
        dispersion)
     77666-73-0
                  117573-82-7
                                122882-19-3
                                               122882-20-6
                                                             136051-94-0
IT
                                 290360-64-4
     137641-46-4
                   290360-63-3
        (photog. film contg. antihalation dye and solid dye
        dispersion)
                    194419-30-2P
IT
     190436-30-7P
                                   219952-45-1P
                                                   219952-46-2P
        (prepn. of triazole deriv. photog. cyan
        coupler)
                                     15159-40-7, 4-Morpholinecarbonyl
IT
     105-34-0, Methyl cyanoacetate
                25761-72-2, Diallylcarbamoyl chloride 163119-16-2,
     chloride
     2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4
        (prepn. of triazole deriv. photog. cyan
        coupler)
IT
     184947-09-9P 188745-52-0P
        (triazole deriv. photog. cyan coupler
```

L25 ANSWER 5 OF 39 HCA COPYRIGHT 2003 ACS

133:170197 Silver halide photographic

light-sensitive material and image forming method.
Yoneyama, Hiroyuki; Ohzeki, Katsuhisa; Deguchi, Yasuaki; Takada,
Katsuyuki (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP
1024402 A2 20000802, 226 pp. DESIGNATED STATES: R: AT,
BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI,
LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP
2000-101629 20000128. PRIORITY: JP 1999-22904 19990129; JP
1999-22951 19990129; JP 1999-23318 19990129; JP 1999-127612
19990507.

AB The invention relates to a silver halide photog. light-sensitive material having excellent rapid processing suitability, and to a method of forming an image using the same. There is disclosed a Ag halide photog. light-sensitive material comprising at least a Ag halide emulsion layer contg. a yellow dye-forming coupler, a Ag halide emulsion layer contg. a magenta dye-forming coupler and a Ag halide emulsion layer contg. a cyan dye-forming coupler, on a support, wherein: the Ag halide emulsion layer contg. a yellow dye-forming coupler is located more apart from the support than .qtoreq.1 of the Ag halide emulsion layer contg. a magenta dye-forming coupler and the Ag halide emulsion layer contg. a cyan dye-forming coupler, and Ag halide grains contained in the Ag halide emulsion layer contg. a yellow dye-forming coupler comprises a high AgCl emulsion in which the content of Ag halide is 80 mol% or more. There is also disclosed a method of forming an image using the light-sensitive material.

188745-52-0 (emulsion layer for **photog**. light-sensitive material with excellent rapid-processing suitability using)

RN 188745-52-0 HCA CN 1H-Pyrrolo[1,2-b]

IT

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

Poly(dimethylsiloxane)

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TCM
        G03C007-30
IC
         G03C007-396; G03C007-407; G03C007-42
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
    photog imaging method
ST
    Light-sensitive materials
IT
       Photographic couplers
       Photographic emulsions
      Photographic films
        (emulsion layer for photog. light-sensitive material
        with excellent rapid-processing suitability using)
     208343-47-9
                   287730-77-2
IT
        (UV-absorbing agent; emulsion layer for photog.
        light-sensitive material with excellent rapid-processing
        suitability using)
IT
     9002-89-5, Polyvinyl alcohol
        (acryl-modified; emulsion layer for photog.
        light-sensitive material with excellent rapid-processing
        suitability using)
                 2634-33-5P, 1,2-Benzisothiazol-3(2H)-one
                                                             2736-18-7P
IT
     122-99-6P
                                                             93629-90-4P
     4247-02-3P
                  26098-04-4P
                                52093-21-7P
                                              66710-66-5P
                    287916-51-2P
     287730-69-2P
        (coating soln. for constitutional layers of photog.
        light-sensitive material with excellent rapid-processing
        suitability using)
IT
               106-84-3
                          109-43-3
                                     577-11-7
                                                614-33-5
                                                            903-19-5
     84-61-7
                             2528-39-4
                                         3846-71-7
                                                     3864-99-1
                 2432-87-3
     2211-98-5
                             7631-86-9, Silica, uses
                                                       9003-39-8,
                 5377-19-5
     3896-11-5
                              9016-00-6, Poly(dimethylsiloxane)
     Poly(vinylpyrrolidone)
     25267-41-8, N-tert-Butyl acrylamide homopolymer
                                                       25973-55-1
                                            31900-57-9,
     26967-76-0
                  27084-89-5 31037-84-0
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33145-10-7

36631-30-8

59272-84-3

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89929-65-7 93951-12-3
                 71086-85-6
                               85238-64-8
    71067-09-9
                                               124351-77-5
                                                             137193-60-3
    115895-09-5
                  117827-06-2
                                 122586-52-1
                  158574-65-3
                                 168689-49-4
                                               168770-02-3
                                                             180675-30-3
    142776-95-2
                                               219562-14-8
                  202483-62-3
                                 202483-63-4
    188745-52-0
                                 287730-76-1
                  287730-75-0
    287730-74-9
        (emulsion layer for photog. light-sensitive material
       with excellent rapid-processing suitability using)
                  95050-16-1
                               131169-88-5
                                             152827-98-0
                                                           287732-68-7
IT
    70950-42-4
        (emulsion layer for photog. light-sensitive material
       with excellent rapid-processing suitability using mixt. contg.)
IT
        (fluorescent brightening agent; emulsion layer for photog
        . light-sensitive material with excellent rapid-processing
        suitability using)
    1314-13-2, Zinc oxide, uses
                                   2397-00-4
                                               9002-88-4
                                                           13463-67-7,
IT
    Titanium dioxide, uses 57455-37-5, Ultramarine
        (laminated paper for photog. light-sensitive material
        with excellent rapid-processing suitability using)
                                 166523-33-7P
                   90895-32-2P
IT
     68392-94-9P
        (prepn. of cubic silver halide emulsion for
        photog. light-sensitive material with excellent
        rapid-processing suitability using)
     41665-49-0
                 90895-26-4
                               117633-60-0
                                             125348-03-0
                                                           160911-24-0
IT
        (prepn. of green sensitive emulsion layer for silver
        halide photog. light-sensitive material with
        excellent rapid-processing suitability using)
                            2503-56-2, 4-Hydroxy-6-methyl-1,3,3a,7-
IT
     149-45-1
               1934-21-0
                                  25035-82-9, Butyl acrylate-methacrylic
     tetraazaindene
                      7772-98-7
                      160683-19-2
                                    224323-12-0
                                                  287730-70-5
     acid copolymer
        (prepn. of tabular silver halide emulsion for
        photog. light-sensitive material with excellent
        rapid-processing suitability using)
     7783-90-6P, Silver chloride, reactions
IT
     13461-16-0P
                                 86893-76-7P
                   80815-18-5P
        (prepn. of tabular silver halide emulsion for
        photog. light-sensitive material with excellent
        rapid-processing suitability using)
IT
     16903-35-8, Chloroauric acid
        (prepn. of tabular silver halide emulsion for
        photog. light-sensitive material with excellent
        rapid-processing suitability using)
IT
     47938-06-7P
        (prepn. of tabular silver halide emulsion for
        photog. light-sensitive material with excellent
        rapid-processing suitability using)
    ANSWER 6 OF 39 HCA COPYRIGHT 2003 ACS
L25
133:112355 Silver halide color photographic
     material with excellent color reproduction and reduced fog.
     Ishidai, Hiroshi; Tanaka, Shigeo (Konica Co., Japan). Jpn. Kokai
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Tokkyo Koho JP 2000199946 A2 20000718, 65 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1998-377437 19981230.

GI

The title **photog**. material contains a **cyan coupler** I, II (R11, R13 = branched alkyl, substituted alkyl,
substituted aryl, heterocycle; R12, R14 = substituent; X11, X12 = H,
atom or group capable of cleaving upon reaction with color **photog**. developer oxide), III, or IV (R21-26 = electron
withdrawing group; X21, X22 = H, atom or group capable of cleaving
upon reaction with color **photog**. developer oxide) in a **Ag halide** emulsion layer.

IT 282732-88-1

(cyan coupler in Ag halide
color photog. paper with excellent color reprodn. and
reduced fog)

RN 282732-88-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(dodecyloxy)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

Me-
$$(CH_2)_{11}$$
-O

N

CN

CN

t-Bu

Me

t-Bu

IC ICM G03C007-38

ICS G03C001-035; G03C001-42; G03C007-392

74-2 (Radiation Chemistry, Photochemistry, and CC Photographic and Other Reprographic Processes)

silver halide color photog paper ST

cyan coupler

Color photographic paper IT

Cyan couplers

(Ag halide color photog. material

with excellent color reprodn. and reduced fog)

282732-86-9 211428-02-3 282732-85-8 209536-40-3 211428-00-1 IT 282732-87-0 **282732-88-1 282732-89-2**

(cyan coupler in Ag halide

color photog. paper with excellent color reprodn. and reduced fog)

282732-92-7 195253-70-4 282732-90-5 282732-91-6 25746-66-1 IT (stain-resistant agent in Ag halide color photog. paper with excellent color reprodn. and reduced fog)

ANSWER 7 OF 39 HCA COPYRIGHT 2003 ACS L25

133:81523 Silver halide color cinephotographic film with high chromaticity. Sakai, Shuichi; Takahashi, Osamu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000187310 A2 20000704, 85 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-363002 19981221.

GI

The material involves a support and (A) .gtoreq.1 light-insensitive hydrophilic layer placed between the support and a photosensitive Ag halide layer nearest to the support and (B) color-forming emulsion layers in which .gtoreq.1 cyan color-forming emulsion layer contains a cyan coupler I (Za, Zb = CR3:, N.tplbond.; R1, R2 = electron-withdrawing group with Hammett's .sigma.p value .gtoreq.20; R3 = H, substituent; X = H, group released in coupling reaction with an arom. primary amine color developer). The film shows high chromaticity, improved durability, and both sharpness and white background.

IT 188745-52-0P

(silver halide color cinephotog. film contg. specified cyan coupler with high chromaticity)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

$$t-Bu$$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$
 $t-Bu$

IC

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ICS G03C001-83; G03C007-38
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
     silver halide photog emulsion
ST
     cyan coupler; cinephotog film silver
     halide emulsion coupler
IT
     Photographic films
        (cinephotog.; silver halide color cinephotog.
        film contq. specified cyan coupler with high
        chromaticity)
     Cyan couplers
IT
        (silver halide color cinephotog. film contg.
        specified cyan coupler with high
        chromaticity)
                   194419-30-2P
IT
     190436-30-7P
        (intermediate; silver halide color
        cinephotog. film contg. specified cyan coupler
        from)
                   200049-66-7
     194419-31-3
IT
        (intermediate; silver halide color
        cinephotog. film contg. specified cyan coupler
        from)
     105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl
IT
                163119-16-2
                              194419-32-4
     chloride
        (silver halide color cinephotog. film contg.
        specified cyan coupler from)
IT
     188745-52-0P
        (silver halide color cinephotog. film contg.
        specified cyan coupler with high
        chromaticity)
     184947-09-9
IT
        (silver halide color cinephotog. film contg.
        specified cyan coupler with high
        chromaticity)
    ANSWER 8 OF 39 HCA COPYRIGHT 2003 ACS
L25
132:341117 Silver halide photographic
     material with improved processing stability. Taniguchi, Makoto
```

(Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP

2000131812 A2 **20000512**, 47 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-321491 19981027.

GΙ

-The title photog. material contains .gtoreq.1 compd. AB R2ZR4:CR1Y(:0)R3 (Y, Z = C; R1, R2 = OH, amino, alkylamino, anilino, heterocyclic amino, acylamino, alkylsulfonylamino, arylsulfonylamino, heterocyclic sulfinylamino, alkoxycarbonylamino, carbamoylamino, sulfamoylamino, SH, alkylthio, arylthio, heterocyclic thio; R3 = H, group linking to Y by C, O or N atom; R4 = H, group linking to Z by C, O or N atom, R3 and R4 may form a ring) and .gtoreq.1 coupler of the formula I (R101, R102 = alkyl, aryl; R103-105 = H, alkyl, aryl; Z = nonmetal atoms required to form a satd. ring; R106 = substituent; X = heterocyclic group, substituted amino, aryl; Y = H, group releasing upon color development). The material is independent of the variation of conditions in processing and the cyan coupler forms images stably even if the pH of developing bath rises upon development.

IT 188745-52-0

CN

(photog. paper contg. enone compd. and pyrrolotriazole cyan coupler)

RN 188745-52-0 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrrolotriazole cyan coupler photog paper; enone compd photog paper'

IT Cyan couplers

Photographic paper

(photog. paper contg. enone compd. and pyrrolotriazole cyan coupler)

IT 3290-92-4P

(bromination of; prepn. of pyrrolotriazole deriv. photog
. cyan coupler)

IT 188745-52-0 267650-14-6

(photog. paper contg. enone compd. and pyrrolotriazole cyan coupler)

IT 636-38-4 15042-01-0 34421-11-9 114625-74-0 **184947-09-9** (photog. paper contg. enone compd. and pyrrolotriazole cyan coupler)

IT 1889-96-9P 194419-31-3P

(photog. paper contg. enone compd. and pyrrolotriazole cyan coupler)

IT 85391-84-0P 190436-30-7P 194419-30-2P (prepn. of pyrrolotriazole deriv. photog. cyan coupler)

IT 105-34-0, Methyl cyanoacetate 15625-89-5 25761-72-2, Diallylcarbamoyl chloride 163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol 200049-66-7

(prepr. of pyrrolotriazole deriy, photog, cyan

(prepn. of pyrrolotriazole deriv. photog. cyan coupler)

L25 ANSWER 9 OF 39 HCA COPYRIGHT 2003 ACS

132:42772 Silver halide color photographic

material with reduced color mixture. Yoshioka, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11344792 A2 19991214 Heisei, 69 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-169302 19980602.

GI

In the title photog. material comprising on a support at AB least 1 blue-sensitive (yellow coloring) emulsion layer, at least 1 green-sensitive (magenta coloring) emulsion layer, at least 1 red-sensitive (cyan coloring) emulsion layer, and at least 1 light-insensitive hydrophilic colloidal layer, one of the above layer contains phenidone I (Ra1, Ra2 = H, alkyl, aryl; Ra3, Ra4 = H, alkyl, aryl; Ra5 = aryl) and hydroxylamine Rb1N(Rb2)OH (Rb1, Rb2 = alkyl, alkenyl, aryl, heterocycle, acyl, alkoxycarbonyl, carbamoyl). The cyan coloring emulsion layer may contain a specified hydroguinone cyan coupler.

IT 188745-52-0P

(hydroguinone cyan coupler in red-sensitive emulsion layer of silver halide color photog. paper)

188745-52-0 HCA RN

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, CN 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

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ICM G03C007-392
IC
     ICS G03C007-38
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     silver halide color photog material;
ST
     hydroquinone cyan coupler phenidone
     hydroxylamine
IT
     Color photographic paper
       Cyan couplers
        (silver halide color photog.
        material with reduced color mixt.)
IT
     188745-52-0P
        (hydroquinone cyan coupler in red-sensitive
        emulsion layer of silver halide color
     photog. paper)
7427-67-0, N,N-Didodecylhydroxylamine
                                              252647-36-2
IT
        (hydroxylamine deriv. in red-sensitive emulsion layer of
        silver halide color photog. paper)
IT
     220323-19-3
        (phenidone deriv. in red-sensitive emulsion layer of
        silver halide color photog. paper)
     202483-63-4P
IT
        (phenidone deriv. in red-sensitive emulsion layer of
        silver halide color photog. paper)
     105-34-0, Methyl cyanoacetate 7726-95-6, Bromine, reactions
IT
     15159-40-7, Morpholinocarbonyl chloride 163119-16-2,
     2,6-Di-tert-butyl-4-methylcyclohexanol
                                               194419-32-4
        (prepn. of hydroquinone cyan coupler in
```

red-sensitive emulsion layer of silver halide

194419-31-3P

194419-30-2P

(prepn. of hydroquinone cyan coupler in

200049-66-7P

color **photog**. paper)

190436-30-7P

IT

red-sensitive emulsion layer of silver halide color photog. paper)

IT 23130-42-9P 53633-31-1P 53633-32-2P (prepn. of phenidone deriv. in red-sensitive emulsion layer of silver halide color photog. paper)

L25 ANSWER 10 OF 39 HCA COPYRIGHT 2003 ACS
131:293252 Silver halide color photographic
material. Otani, Kuniaki (Fuji Photo Film Co., Ltd., Japan). Jpn
Kokai Tokkyo Koho JP 11282138 A2 19991015 Heisei, 78 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-100409 19980327.

$$R^{1}$$
 R^{2}
 R^{1}
 R^{2}
 R^{12}
 R^{12}
 R^{1}
 R^{2}
 R^{1}
 R^{2}
 R^{2}

GΙ

In the title photog. material possessing .gtoreq.1 yellow AB dye-forming coupler-contq., .qtoreq.1 magenta dye-forming coupler-contg., and .gtoreq.1 cyan dye-forming coupler-contg. Ag halide emulsion layers on a support, the cyan dye-forming coupler -contg. emulsion layer contains .gtoreq.1 cyan coupler I [Za, Zb = CR3, N, either one is N and the other CR3; R1, R2 = electron-attracting group with Hammett's substituent const. .sigma.p .gtoreq.0.20, the sum of .sigma.p values of R1 and R2 is .qtoreq.0.65; R3 = H, substituent; X = H, group releasing upon coupling with an oxidized arom. primary color developing agent, R1-3 and X may be divalent groups which link to a polymer higher than dimer or polymer chain to form a (co)polymer] and a Ag(Br,Cl,I), Ag(Br,Cl) or AgCl emulsion having a AgCl content of .gtoreq.95 mol%, and .gtoreq.1 compd. II [X1, X2 = H, OH, halo, SO3H (or its salt), CO2H (or its salt), NR13R14, NHSO2R15, 1 of X1 and X2 should be OH; R11, R12 = H, substituent; R13, R14 = H, alkyl, aryl, heterocyclic group, R13 and R14 may link each other to form a heterocycle; R15 = alkyl, aryl, amino, heterocyclic group; M = H, monovalent alkali metal] is contained in the material during Ag halide grain formation and/or chem. ripening. The material shows improved color reproducibility and stable sensitivity independent of the variation in humidity upon exposure and provides durable color images

IC ICM G03C007-38 G03C001-035; G03C007-392 ICS 74-2 (Radiation Chemistry, Photochemistry, and CC Photographic and Other Reprographic Processes) ST photog emulsion phenolic compd; cyan sensitizer pyrrolotriazole compd photog IT Cyan couplers (pyrrolotriazole deriv. photog. cyan coupler) IT Photographic emulsions (silver chloride-rich photog. emulsion contg. phenolic compd.) IT 190436-30-7P (bromination of; prepn. of pyrrolotriazole deriv. photog . cyan coupler) IT 149-45-1 (photog. film contg. phenolic compd.) IT 7440-80-4 (photog. film contg. phenolic compd.) 67831-35-0 IT 34421-11-9 (photog. film contg. phenolic compd. and ketone compd.) IT 194419-30-2P 194419-31-3P (prepn. of pyrrolotriazole deriv. photog. cyan

coupler) IT 105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl 25761-72-2, Diallylcarbamoyl chloride 163119-16-2, chloride 2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4 (prepn. of pyrrolotriazole deriv. photog. cyan coupler) IT 179330-29-1 **188745-52-0** (pyrrolotriazole deriv. photog. cyan coupler) 179330-32-6P IT (pyrrolotriazole deriv. photog. cyan coupler) ANSWER 11 OF 39 HCA COPYRIGHT 2003 ACS L25

131:264719 Color image formation and desilvering processing composition containing guanidine compound. Deguchi, Yasuaki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11265046 A2 19990928 Heisei, 82 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-84894 19980316.

In the title process in which a **silver halide** color **photog**. material, possessing .gtoreq.1 yellow-coloring, .gtoreq.1 magenta-coloring, and .gtoreq.1 cyan-coloring **Ag halide** emulsion layers and .gtoreq.1 non-photosensitive hydrophilic colloid layer on a support, is subjected to development, desilvering, washing and/or stabilizing, and drying steps following imagewise exposure, .gtoreq.1 of the desilvering and washing and/or stabilizing steps is carried out in the presence of a compd. NH2C(:NH)NR1R2 (R1, R2 = H, alkyl, aralkyl, the total C no. of R1 and R2 is 3-8, R1 .noteq. R2 .noteq. H, R1 and R2 may link each other to form a ring). A desilvering processing compn. contg. the above compd. is also claimed. Residual developer is well removed by using the compd. and photog. material gives images with improved color reproducibility without stains.

IT 184947-09-9P

AB

(photog. cyan coupler)

RN 184947-09-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

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ICM G03C007-42
IC
     ICS G03C001-035; G03C007-32; G03C007-384
CC
     74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     photog processing desilvering quanidine compd; developer
ST
     removing agent guanidine photog processing
     Photographic processing
IT
        (photog. desilvering, stabilizing, or washing process
        using guanidine compd. as developer-removing agent)
IT
     Cyan couplers
        (pyrazole or tetrazole deriv. photog. cyan
        coupler)
IT
     190436-30-7P
        (bromination of; prepn. of photog. triazole deriv.
        cyan coupler)
     184947-09-9P 188745-52-0P
IT
        (photog. cyan coupler)
     202483-63-4
IT
        (photog. cyan coupler)
                 244755-95-1P
IT
     462-69-1P
        (photog. desilvering, stabilizing, or washing process
        using guanidine compd. as developer-removing agent)
               35144-72-0
IT
        (photog. desilvering, stabilizing, or washing process
        using guanidine compd. as developer-removing agent)
                                 53633-32-2P
                   53633-31-1P
                                               194419-30-2P
     23130-42-9P
IT
                    200049-66-7P
     194419-31-3P
        (prepn. of photog. triazole deriv. cyan
        coupler)
                                 105-34-0, Methyl cyanoacetate
IT
     100-63-0, Phenylhydrazine
     106-65-0, Dimethylsuccinate 112-82-3, 1-Bromohexadecane
     15159-40-7, 4-Morpholinecarbonyl chloride 25761-72-2,
                                 163119-16-2, 2,6-Di-tert-butyl-4-
     Diallylcarbamoyl chloride
     methylcyclohexanol
                         194419-32-4
        (prepn. of photog. triazole deriv. cyan
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L25 ANSWER 12 OF 39 HCA COPYRIGHT 2003 ACS

coupler)

131:122889 Silver halide color photographic

material. Mikoshiba, Hisashi; Soejima, Shin; Shimada, Yasuhiro; Takahashi, Osamu; Deguchi, Yasuaki (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 932079 Al 19990728, 174 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1999-101049 19990122. PRIORITY: JP 1998-25208 19980123; JP 1998-76596 19980310; JP 1998-78512 19980312; JP 1998-80368 19980312; JP 1998-288708 19980928.

There is disclosed a silver halide color photog. material comprising a compd. of formula R1C(R7)n[C(R2)(R3)OCOCR4=CR5R6]3-n wherein R1 is a hydrogen atom, an alkyl group having 1 to 30 carbon atoms, an alkenyl group having 2 to 30 carbon atoms, or an aryl group; R2, R3, R4, R5, R6, and R7 each independently represents a hydrogen atom or an alkyl group having 1 to 30 carbon atoms; and n is 0 or 1. The color photog. material provide cyan images of excellent fastness.

IT 184947-09-9

(color **photog**. emulsions for improved **cyan** dye **image** formation contg. vinyl compds. and)

RN 184947-09-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-30 ICS G03C007-38

ICA C07C069-533

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog material cyan image improved fastness; vinyl stabilizer color photog material

IT Photographic emulsions

(color; contg. vinyl compds. and pyrrolotriazole cyan dye formers)

IT Photographic stabilizers

(vinyl compds. for color photog. materials for forming

```
cyan images of improved fastness)
IT
     1820-47-9
                 3290-92-4
                             3524-68-3
                                        4986-89-4
                                                     15625-89-5,
                                      85391-84-0
                                                   232947-49-8
     Trimethylolpropane triacrylate
     232947-50-1
                                               232947-53-4 232947-54-5
                   232947-51-2
                                 232947-52-3
        (color photog. emulsions for improved cyan
        dye image formation contg. pyrrolotriazole
        couplers and)
     31037-84-0
                               117827-06-2
                                             151019-65-7
                                                           178743-91-4
IT
                  99141-89-6
     184947-09-9 188745-52-0
                               200049-62-3
                               211051-73-9
                                             211051-76-2
     200110-90-3 200137-20-8
                   232947-55-6 232947-56-7
                                             232947-57-8
     219553-72-7
     232947-58-9
                   232947-59-0
                                 232947-60-3
                                               232951-89-2
        (color photog. emulsions for improved cyan
        dye image formation contg. vinyl compds. and)
     25035-82-9, Butyl acrylate-methacrylic acid copolymer
                                                              140201-11-2
IT
                   211052-01-6
                                 211052-05-0
                                               220323-13-7
                                                             232947-62-5
     211051-99-9
                                               232947-66-9
     232947-63-6
                   232947-64-7
                                 232947-65-8
                                                             232951-90-5
     232951-91-6
        (color photog. emulsions for improved cyan
        dye image formation contg. vinyl compds.,
        pyrrolotriazole cyan couplers and)
                                                  200049-66-7P
IT
     190436-30-7P
                    194419-30-2P 194419-31-3P
        (prepn. and reaction in prepg. pyrrolotriazole cyan
        photog. coupler)
                                232947-67-0P
                  73923-17-8P
     4445-11-8P
IT
        (prepn. and reaction in prepg. reagent for color photog
        . materials)
     202483-63-4P
IT
        (prepn. and use in color photog. emulsions for improved
        cyan dye image formation)
                                     15159-40-7, 4-Morpholinecarbonyl
     105-34-0, Methyl cyanoacetate
IT
                163119-16-2
     chloride
                              194419-32-4
        (reaction in prepg. pyrrolotriazole cyan photog
        . coupler)
     106-65-0, Methyl succinate
IT
        (reaction in prepg. reagent for color photog.
        materials)
    ANSWER 13 OF 39 HCA COPYRIGHT 2003 ACS
L25
131:122880 Developer composition for silver halide
     color photographic material and development. Noguchi,
     Atsushi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho
     JP 11194462 A2 19990721 Heisei, 56 pp.
                                              (Japanese).
                     APPLICATION: JP 1997-361249 19971226.
     CODEN: JKXXAF.
     The developer compn. consists of 1 part of a concd. soln. in which
AB
     the concn. of carbonates is in the range of 0.5-2 M, the K+ to Na+
     ratio is in the range of 1-4, and the pH value is .gtoreq.12.5. A
     Ag halide color photog. material contg.
     a pyrrolotriazole deriv. as a cyan coupler is
     developed with the compn. The compn. contg. developing agents in a
     high concn. shows excellent storage stability and the deposition of
```

insol. matters upon storage and coloration of the processing soln.

and container due to air oxidn. are prevented.

IT 188745-52-0

(development of **photog**. film contg. pyrrolotriazole deriv. as a **cyan coupler**)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-413

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

photog developer carbonate; potassium sodium content photog developer; pyrrolotriazole coupler photog film development

IT Surfactants

(anionic; carbonate, potassium, and sodium ion content-controlled photog. developer)

IT Photographic developers

(carbonate, potassium, and sodium ion content-controlled **photog**. developer)

IT Cyan couplers

(development of **photog**. film contg. pyrrolotriazole deriv. as a **cyan coupler**)

IT 102-71-6, uses 122-20-3, Triisopropanolamine 584-08-7, Potassium carbonate 657-84-1, Sodium p-toluenesulfonate 5080-22-8, Isopropylhydroxylamine

(carbonate, potassium, and sodium ion content-controlled photog. developer)

IT 188745-52-0

(development of **photog**. film contg. pyrrolotriazole deriv. as a **cyan coupler**)

IT 118181-83-2

GΙ

(surfactant; carbonate, potassium, and sodium ion content-controlled **photog**. developer)

L25 ANSWER 14 OF 39 HCA COPYRIGHT 2003 ACS
131:108839 Color photographic material with improved
processing stability. Bergthaller, Peter (Agfa-Gevaert A.-G.,
Germany). Ger. Offen. DE 19801352 A1 19990722, 20 pp.
(German). CODEN: GWXXBX. APPLICATION: DE 1998-19801352 19980116.

In the color photog. material comprising a support, at AΒ least 1 blue-sensitive, yellow coupler-contg. Ag halide emulsion layer, at least 1 green-sensitive, magenta coupler-contg. Ag halide emulsion layer, at least 1 red-sensitive, cyan coupler-contg. Ag halide emulsion layer, as well as further light-insensitive layers, the photog. material contains at least 1 cyan coupler represented by a general formula I (R11 = alkyl, aryl, acylamino, alkylcarbamoyl, arylcarbamoyl, heterocyclyl; R12 = electron acceptor group; R13 = electron acceptor group; R14 = alkyl, aryl; R15 = divalent bridge with 2-4 bridging atoms; X = 0, NSO2R21; R21 = ballast group; Y = splitting group). The material shows improved processing stability. 231962-68-8P ΙT

(cyan coupler in color photog. material with improved processing stability)

RN 231962-68-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(3,5-dichlorophenyl)-5-[[[(3-methoxy-3-oxopropyl)methylamino]carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

C07D487-04; C07D233-72 ICA 74-2 (Radiation Chemistry, Photochemistry, and CC Photographic and Other Reprographic Processes) color photog material cyan coupler ST Color photographic paper IT Cyan couplers (color photog. material with improved processing stability) Photographic films IT (color; color photog. material with improved processing stability) IT 231962-68-8P (cyan coupler in color photog.

(cyan coupler in color photog.
material with improved processing stability)

IT 231962-69-9

ICM G03C007-38

IC

(prepn. of cyan coupler for color

photog. material with improved processing stability)

IT 231962-70-2P

(prepn. of cyan coupler for color

photog. material with improved processing stability)

L25 ANSWER 15 OF 39 HCA COPYRIGHT 2003 ACS

131:80686 Silver halide color photographic material containing formyl-substituted developing agent and its imaging. Makuda, Toshiyuki; Nakamura, Takashi; Nakamura, Takeki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11167185 A2 19990622 Heisei, 66 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-60742 19980312. PRIORITY: JP 1997-265568 19970930.

The color photog. material having .gtoreq.3 photog
. layers on a support contains 3 Ag halide
emulsions with different sensitivity one another, .gtoreq.3
dye-forming couplers, and a precursor of a color developer
OHCArXLm(PPD) (Ar = aryl, heterocyclic group; X = methylene located
at a cleanable site by the oxidn. of the CHO group; L = linkage
group; m = 0-3; PPD = chromogenic developer moiety). The
imaging of the above material using an activator soln.

contg. a peroxide and no developing agent is also claimed. The material shows improved storage stability and gives high-contrast images without stain formation in the developing agent.

IT 188745-52-0

(cyan coupler; imaging of
silver halide color photog. material
contg. formyl-substituted developing agent)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-00

ICS G03C001-42; G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog film development formyl developer; base precursor color developer photog; formyl substituted phenylenediamine color developer photog; activator peroxide processing color photog film

IT Photographic development

Photographic films

(color; imaging of silver halide color photog. material contg. formyl-substituted developing agent)

IT Color developers

(imaging of silver halide color

photog. material contg. formyl-substituted developing
agent)

IT 223481-90-1P

(color developer precursor; imaging of silver halide color photog. material contg.

```
formyl-substituted developing agent)
                                                              229155-67-3
IT
     223481-95-6
                   223482-00-6
                                223482-04-0
                                               229155-66-2
     229155-68-4
        (color developer precursor; imaging of silver
       halide color photog. material contg.
        formyl-substituted developing agent)
                  117827-06-2 175873-64-0 188745-52-0
     93951-12-3
IT
     229155-65-1
        (cyan coupler; imaging of
        silver halide color photog. material
        contq. formyl-substituted developing agent)
IT
     223482-11-9P
        (deprotection of; imaging of silver
       halide color photog. material contg.
        formyl-substituted developing agent)
     19438-10-9, Methyl 3-hydroxybenzoate
IT
        (formylation of; imaging of silver
        halide color photog. material contg.
        formyl-substituted developing agent)
                  124351-77-5
                                152827-98-0
                                              168770-02-3
IΤ
     85888-24-0
        (magenta coupler; imaging of silver
        halide color photog. material contg.
        formyl-substituted developing agent)
ΙT
     24589-99-9P
        (protection of OH and CHO with ethylene glycol and chloromethyl
        Me ether; imaging of silver halide
        color photog. material contg. formyl-substituted
        developing agent)
     223482-09-5
IT
        (reaction with benzyl alc. deriv.; imaging of
        silver halide color photog. material
        contg. formyl-substituted developing agent)
IT
     223482-07-3P
        (reaction with nitrobenzoylamide deriv.; imaging of
        silver halide color photog. material
        contg. formyl-substituted developing agent)
IT
     223603-24-5P
        (redn. of; imaging of silver halide
        color photog. material contg. formyl-substituted
        developing agent)
                  70950-45-7
                               95050-16-1
                                            229155-63-9
     30744-85-5
IT
        (yellow coupler; imaging of silver
        halide color photog. material contg.
        formyl-substituted developing agent)
     ANSWER 16 OF 39 HCA COPYRIGHT 2003 ACS
131:25704 Method for processing silver halide color
     photographic material containing pyrrolotriazole
     coupler with low pH bleach-fixing agent to reduce
                  Ishikawa, Takatoshi (Fuji Photo Film Co., Ltd.,
     cyan stain.
     Japan). Jpn. Kokai Tokkyo Koho JP 11133562 A2 19990521
     Heisei, 64 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
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1997-292946 19971024.

GI

AB In the method for processing Ag halide color photog. material comprising imagewise exposure, chromogenic development, desilvering, and washing and/or stabilizing, the bleach-fixing soln. shows the pH 3.5-5.5, preferably contg. RSO2M (R = alkyl, cycloalkyl, alkenyl, alkynyl, aryl, aralkyl; M = H, alkali metal, ammonium, quaternary amine), and the photog. material contains a pyrrolotriazole cyan coupler I (Za, Zb = CR3:, N:; Za .noteq. Zb; R1, R2 = electron-withdrawing group with the Hammett's .sigma.p .gtoreq.0.20 and the sum of .sigma.p .gtoreq.0.65; R3 = H, substituent; X = H, leaving group by coupling with the oxidized developing agent; I may take dimer or polymer) in the cyan-developing layer,. photog. material used in the above processing may contain a pyrazolinone deriv. Though I provides a cyan dye with an outstanding purity, it is accompanied by cyan stain, which is reduced by the low pH bleach-fixing, consequently, the combination improves color image quality of the processed material.

IT 184947-09-9

(cyan coupler; method for processing silver halide color photog. material contg. pyrrolotriazole coupler with low pH bleach-fixing agent to reduce cyan stain)

RN 184947-09-9 HCA
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-42

ICS G03C007-384; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST processing color photog film developer; sulfinic acid bleach fixing photog processing; pyrroloazole cyan coupler photog film development; pyrrolotriazole cyan coupler photog film processing

IT Color photographic processing

(bleach-fixing, solns. for; method for processing silver halide color photog. material contg. pyrrolotriazole coupler with low pH bleach-fixing agent to reduce cyan stain)

IT Photographic fixing

Photographic fixing

(color, bleach-fixing, solns. for; method for processing silver halide color photog. material contg. pyrrolotriazole coupler with low pH bleach-fixing agent to reduce cyan stain)

IT Cyan couplers

(method for processing silver halide color photog. material contg. pyrrolotriazole coupler with low pH bleach-fixing agent to reduce cyan stain)

IT 202483-63-4

(color-mixing prevention agent; method for processing silver halide color photog. material contg. pyrrolotriazole coupler with low pH bleach-fixing agent to reduce cyan stain)

IT 184947-09-9 188745-52-0 200049-62-3
(cyan coupler; method for processing silver halide color photog. material contg. pyrrolotriazole coupler with low pH bleach-fixing agent to reduce cyan stain)

IT 108-59-8, Methyl malonate

(hexadecanation of; method for processing silver halide color photog. material contg.

pyrrolotriazole coupler with low pH bleach-fixing agent to reduce cyan stain)

IT 23130-42-9P

(hydrolysis and dehydration of; method for processing silver halide color photog. material

contg. pyrrolotriazole coupler with low pH bleach-fixing agent to reduce cyan stain)

IT 112-82-3, 1-Bromohexadecane

(reaction with Me succinate; method for processing silver halide color photog. material contg. pyrrolotriazole coupler with low pH bleach-fixing agent

to reduce cyan stain)

IT 53633-32-2P

(reaction with phenylhydrazine; method for processing silver halide color photog. material

contg. pyrrolotriazole coupler with low pH bleach-fixing agent to reduce cyan stain)

IT 100-63-0, Phenylhydrazine

(reaction with succinate deriv.; method for processing silver halide color photog. material contg. pyrrolotriazole coupler with low pH

bleach-fixing agent to reduce cyan stain)

L25 ANSWER 17 OF 39 HCA COPYRIGHT 2003 ACS

131:25703 Processing of silver halide color

photographic material containing pyrrolotriazole

coupler with sulfinate-containing developer. Ishikawa,

Takatoshi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11133561 A2 19990521 Heisei, 64 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1997-298729 19971030.

GI

AB In the method for processing **Ag halide** color **photog**. material comprising imagewise exposure, chromogenic development, desilvering, and washing and/or stabilizing, the developer soln. contains RSO2M (R = alkyl, cycloalkyl, alkenyl, alkynyl, aryl, aralkyl; M = H, alkali metal, ammonium, quaternary

amine) and the photog. material contains a pyrrolotriazole cyan coupler I (Za, Zb = CR3:, N:; Za .noteq. Zb; R1, R2 = electron-withdrawing group with the Hammett's .sigma.p .gtoreq.0.20 and the sum of .sigma.p .gtoreq.0.65; R3 = H, substituent; X = H, leaving group by coupling with the oxidized developing agent; I may take dimer or polymer) in the cyan-developing layer. Though the coupler I gives a cyan dye with an outstanding purity, it is accompanied by cyan stain, which is reduced by the addn. of RSO2M, consequently, the combination improves color image quality of the processed material.

IT 184947-09-9

CN

(cyan coupler; processing of silver
halide color photog. material contg.
pyrrolotriazole coupler with sulfinate-contg.
developer)

RN 184947-09-9 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[(di-2propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-413 ICS G03C007-384

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog development cyan coupler;
processing color developer photog film sulfinate; sulfinic
acid additive photog developer; pyrroloazole cyan
coupler photog film development; pyrrolotriazole
cyan coupler photog film processing

IT Photographic development

(color; processing of **silver halide** color **photog**. material contg. pyrrolotriazole **coupler** with sulfinate-contg. developer)

IT Color developers

Cyan couplers

(processing of silver halide color photog. material contg. pyrrolotriazole coupler

with sulfinate-contg. developer)

IT 184947-09-9 188745-52-0 200049-62-3
(cyan coupler; processing of silver
halide color photog. material contg.
pyrrolotriazole coupler with sulfinate-contg.
developer)

IT 536-57-2 1709-60-0 7472-15-3 15451-00-0 60601-05-0 (processing of silver halide color photog. material contg. pyrrolotriazole coupler with sulfinate-contg. developer)

L25 ANSWER 18 OF 39 HCA COPYRIGHT 2003 ACS
130:359244 Processing of silver halide color
 photographic photosensitive material. Yoshida, Kazuaki
 (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP
 11125885 A2 19990511 Heisei, 73 pp. (Japanese). CODEN:
 JKXXAF. APPLICATION: JP 1997-291431 19971023.
GI

In processing an exposed Ag halide color AB photog. material possessing .gtoreq.1 yellow-coloring, .gtoreq.1 magenta-coloring, and .gtoreq.1 cyan-coloring Ag halide emulsion layers and .gtoreq.1 non-coloring hydrophilic colloid layer by using an automatic processor, the material contains .gtoreq.1 cyan dye-forming coupler I [Za, Zb = CR3:, N:, 1 of Za and Zb is N:, and the other CR; R1, R2 = electron-attracting group having a Hammett's substituent const. .sigma.p value of .gtoreq.0.20, the sum of the .sigma.p values of R1 and R2 is .gtoreq.0.65; R3 = H or substituent; X = H or group releasing upon coupling with an oxidized color developing agent, R1-3 and X may be divalent groups which link to a polymer higher than dimer or polymer chain to form a (co)polymer] in .gtoreq.1 of the cyan-coloring emulsion layers and is processed with a color developing soln. contq. .gtoreq.1 compd. R3OL1pL2qL3rH (R3 = C.gtoreq.6 alkyl, aryl; L1, L3 = ethyleneoxy; L2 = glycide; p, q, r = 0-200, when q = 0, p +r .gtoreq. 50 and when q .gtoreq. 1, p + q + r .gtoreq. 20). The unevenness in processing at the end of prints upon color printing and the blotting of cyan color upon laminating prints after processing are prevented effectively.

IT 200111-37-1

(photog. film contg. pyrrolotriazole deriv.
cyan coupler)

RN 200111-37-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylphenylester (9CI) (CA INDEX NAME)

IC ICM G03C007-38 ICS G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog cyan coupler pyrrolotriazole

deriv; developer photog nonionic surfactant

IT Surfactants

(nonionic; photog. developer contg. nonionic
surfactant)

IT Photographic developers

(photog. developer contg. nonionic surfactant)

IT Cyan couplers

(photog. film contg. pyrrolotriazole deriv.

cyan coupler)

IT 202483-63-4P

(color contamination-preventing agent; **photog**. film contq. pyrrolotriazole deriv. **cyan coupler**)

1T 122-20-3, Triisopropanolamine 9002-92-0, Polyethylene glycol lauryl ether 9004-95-9, Polyethylene glycol hexadecyl ether 26027-38-3, Polyethylene glycol p-nonylphenyl ether 37311-00-5, Oxirane-methyloxirane copolymer monododecyl ether 63727-44-6 66988-47-4, Oxirane-methyloxirane copolymer mono(p-nonylphenyl) ether

(photog. developer contg. nonionic surfactant)

IT 200111-37-1

(photog. film contg. pyrrolotriazole deriv.
cyan coupler)

Ι

L25 ANSWER 19 OF 39 HCA COPYRIGHT 2003 ACS
130:359240 Silver halide color photographic
material using novel cyan coupler. Maeda,
Hideki; Matsuoka, Mitsuyuki; Shimata, Yasuhiro (Fuji Photo Film Co.,
Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11119391 A2
19990430 Heisei, 32 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1997-276294 19971008.
GI

NC
$$CO_2$$

H

 $C-R^4$
 R^1
 $C-R^2$
 R^3
 $C-R^4$
 R^1
 R^2
 R^3
 R^3
 R^4

The title material contains a stereochem. pure cyan coupler of the formula I [R1-4, R2'-4' = H or alkyl, R2 and R3 or R2' and R3' may link to form a ring; R5 = aliph. group or aryl; X = H or group releasing upon coupling with an oxidized color developing agent; in the relative configuration of the chem. bonds of the substituents bonding to the cyclohexane ring, it is shown that the groups of which the bonds are indicated by the bold line present over the paper and the H atoms of which the bonds are indicated by the dot line present under the paper]. The variation of color d. in the material due to the variation of compns. in the processing solns. is little.

IT 224769-01-1P

(tert-alkylcyclohexanol pyrrolotriazole deriv. photog
cyan coupler)

RN 224769-01-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, (1.alpha.,2.alpha.,4.alpha.,6.alpha.)-2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME) Relative stereochemistry.

IC ICM G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 28

ST photog cyan coupler alkyl cyclohexanol pyrrolotriazole

IT Cyan couplers

(tert-alkylcyclohexanol pyrrolotriazole deriv. photog cyan coupler)

IT 190436-30-7P 224769-07-7P 224769-08-8P (prepn. of alkylcyclohexanol pyrrolotriazole deriv. photog cyan coupler)

IT 302-01-2, Hydrazine, reactions 6148-64-7 15159-40-7, 4-Morpholinecarbonyl chloride 166522-39-0 194419-32-4 (prepn. of alkylcyclohexanol pyrrolotriazole deriv. photog cyan coupler)

IT 23790-39-8, 2,6-Di-tert-butyl-4-methylcyclohexanone (redn. of; prepn. of alkylcyclohexanol pyrrolotriazole deriv. photog cyan coupler)

IT 224769-02-2 224769-03-3 224769-05-5 224769-06-6 (tert-alkylcyclohexanol pyrrolotriazole deriv. photog cyan coupler)

IT 224769-01-1P 224769-04-4P (tert-alkylcyclohexanol pyrrolotriazole deriv. photog cyan coupler)

L25 ANSWER 20 OF 39 HCA COPYRIGHT 2003 ACS 130:330537 Silver halide color photographic material containing pyrroloazole-type coupler and

image formation. Yokozawa, Akihito (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11109578 A2 1990423 Heisei, 39 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-282822 19970930.

GI

AB The Ag halide photog. material comprises a support having thereon .gtoreq.1 yellow, magenta, or cyan coupler-contg. emulsion layer, in which the cyan coupler-contg. emulsion layer contains a pyrroloazole-type cyan coupler I (R1, R2 = alkyl, aryl; R3, R4, R5 = H, alkyl, aryl; Z = non-metallic atoms required to form a satd. ring; R6 = substituent; X = heterocycle, substituted amino, aryl; Y = H, releasing group in color development), Ag halide tabular grains with av. aspect ratio .gtoreq.3 contg. .gtoreq.95 mol% AgCl assocd. with 0.1-5.0 mol% (vs. Ag) AgBr and/or 0.1-2.0 mol% (vs. Ag) AgI on the surface of the .ltoreq.20 vol.% of the grains. An image is formed by scanning exposure and color development of the obtained Ag halide material. The material shows improved rapid processability, processing stability before and after running processing, and color reprodn. IT 184947-09-9

(pyrroloazole-type cyan coupler for rapid processing with improved color reprodn.)

Ι

RN 184947-09-9 HCA

CN

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[(di-2propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & \text{CH}_2\text{-CH} = \text{CH}_2 \\ & & & \\ \text{CH}_2\text{-CH} = \text{CH}_2 \\ & & \\ \text{CH}_2\text{-CH} =$$

IC ICM G03C007-38

ICS G03C001-035; G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST cyan coupler pyrroloazole photog material

IT Cyan couplers

(pyrroloazole-type cyan coupler for rapid processing with improved color reprodn.)

178743-91-4 179330-29-1 184947-09-9 188745-52-0 (pyrroloazole-type cyan coupler for rapid processing with improved color reprodn.)

L25 ANSWER 21 OF 39 HCA COPYRIGHT 2003 ACS

130:330536 Silver halide color photographic

material containing pyrrolotriazole cyan coupler

and hydroxyurea to improve color reproduction and its processing.

Otani, Shigeaki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai

Tokkyo Koho JP 11109576 A2 19990423 Heisei, 67 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-282821 19970930.

GΙ

The photog. material has a cyan coupler
-contg. Ag halide photog. emulsion
layer contg. Ag(Br,Cl,I), Ag(Br,Cl), or AgCl with
AgCl content .gtoreq.95 mol% and a pyrroloazole
coupler I (Za, Zb = CR3:, N:; Za .noteq. Zb; R1, R2 =

electron-withdrawing group with the Hammett's .sigma.p .gtoreq.0.20 and the sum of .sigma.p in R1 and R2 .gtoreq.0.65; R3 = H, substituent; X = H, leaving group to be released by the coupling reaction with an oxide of a developing agent) and contains a R21R22NCONR23OH (R21-23 = H, alkyl, aryl). A color image is formed by scanning exposure of the above photog. material with a modulated light beam with the scanning pitch narrower than its effective beam diam. and the overlapping width between rasters 5-95%, followed by development. The material gives color images with good color reprodn., light fastness, and pressure resistance.

IT 188745-52-0

CN

(coupler; processing of silver halide color photog. material contg. pyrrolotriazole cyan coupler and hydroxyurea to improve color reprodn.)

RN 188745-52-0 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-34

ICS G03C001-035; G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrroloazole cyan coupler color photog film; pyrrolotriazole cyan coupler color photog film; hydroxyurea additive cyan coupler color photog

IT Photographic emulsions

Photographic films

(color; silver halide color photog.

```
material contg. pyrrolotriazole cyan coupler
        and hydroxyurea to improve color reprodn.)
IT
     Color photographic processing
        (scanning exposure; processing of silver halide
        color photog. material contg. pyrrolotriazole
        cyan coupler and hydroxyurea to improve color
        reprodn.)
ΙT
     Cyan couplers
        (silver halide color photog.
        material contg. pyrrolotriazole cyan coupler
        and hydroxyurea to improve color reprodn.)
     178743-91-4
IT
                   179330-29-1 188745-52-0
                                              200110-90-3
        (coupler; processing of silver halide
        color photog. material contg. pyrrolotriazole
        cyan coupler and hydroxyurea to improve color
        reprodn.)
IT
     23130-42-9P
        (demethylation and redn. of; processing of silver
        halide color photog. material contq.
        pyrrolotriazole cyan coupler and hydroxyurea
        to improve color reprodn.)
IT
     106-65-0, Methyl succinate
        (hexadecanation of; processing of silver halide
        color photog. material contg. pyrrolotriazole
        cyan coupler and hydroxyurea to improve color
        reprodn.)
     7335-35-5
                 7433-46-7
                             26817-00-5
IT
                                          28875-12-9
                                                        52253-30-2
     118410-88-1
                   220323-18-2
        (processing of silver halide color
        photog. material contg. pyrrolotriazole cyan
        coupler and hydroxyurea to improve color reprodn.)
IT
     202483-63-4P
        (processing of silver halide color
        photog. material contg. pyrrolotriazole cyan
        coupler and hydroxyurea to improve color reprodn.)
IT
     100-63-0, Phenyl hydrazine
        (processing of silver halide color
        photog. material contg. pyrrolotriazole cyan
        coupler and hydroxyurea to improve color reprodn.)
IT
     112-82-3, 1-Bromohexadecane
        (reaction with Me succinate; processing of silver
        halide color photog. material contg.
        pyrrolotriazole cyan coupler and hydroxyurea
        to improve color reprodn.)
     53633-32-2P
IT
        (reaction with Ph hydrazine; processing of silver
        halide color photog. material contg.
        pyrrolotriazole cyan coupler and hydroxyurea
        to improve color reprodn.)
     ANSWER 22 OF 39 HCA COPYRIGHT 2003 ACS
L25
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130:160627 Silver halide color photographic

material containing 3-pyrazolidone derivative and cyan coupler with low pKa to improve developability. Yoshioka, Yasuhiro; Soejima, Susumu; Takahashi, Osamu; Saito, Naoki; Mikoshiba, Takashi; Morigaki, Masakazu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11030843 A2 19990202 (Japanese). CODEN: JKXXAF. APPLICATION: JP Heisei, 63 pp. 1997-197992 19970709.

GI

Ι

AΒ The photog. material has .gtoreq.1 cyan dye-developing layer contg. a cyan coupler with the pKa .ltoreq.8.7, and .gtoreq.1 hydrophilic colloid layer contg. a 3-pyrazolidone deriv. I (R1, R2 = H, alkyl, aryl; R3, R4 = H, alkyl, aryl; R5 = aryl; sum of C atoms in R1-R5 >13). Preferable cyan coupler is pyrrolotriazole derivs. The combination of the coupler and 3-pyrazolidone improves rapid developability and dye developability to keep a consistent processing quality.

IT200216-40-6

> (cyan coupler; silver halide color photog. material contg. 3-pyrazolidone deriv. and cyan coupler with low pKa to improve developability)

200216-40-6 HCA RN

CN

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methoxy-3-[[[2-(octyloxy)-5-(1,1,3,3tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

3-pyrazolidone deriv. and cyan coupler with

```
low pKa to improve developability)
IT
     194419-31-3P
        (cyclization and acylation of; silver halide
        color photog. material contg. 3-pyrazolidone deriv. and
        cyan coupler with low pKa to improve
        developability)
IT
     53633-31-1P
        (dehydration of; silver halide color
        photog. material contg. 3-pyrazolidone deriv. and
        cyan coupler with low pKa to improve
        developability)
IT
     163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol
                                                            194419-32-4
        (esterification of; silver halide color
        photog. material contg. 3-pyrazolidone deriv. and
        cyan coupler with low pKa to improve
        developability)
IT
     106-65-0
        (hexadecanation of; silver halide color
        photog. material contg. 3-pyrazolidone deriv. and
        cyan coupler with low pKa to improve
        developability)
IT
     23130-42-9P
                   200049-66-7P
        (hydrolysis of; silver halide color
        photog. material contg. 3-pyrazolidone deriv. and
        cyan coupler with low pKa to improve
        developability)
IT
     112-82-3, 1-Bromohexadecane
        (reaction with Me succinate; silver halide
        color photog. material contg. 3-pyrazolidone deriv. and
        cyan coupler with low pKa to improve
        developability)
IT
     53633-32-2
        (reaction with phenylhydrazine; silver halide
        color photog. material contg. 3-pyrazolidone deriv. and
        cyan coupler with low pKa to improve
        developability)
IT
     80336-04-5
                  118410-88-1
                                211051-31-9 211051-97-7
                                                             211052-03-8
     211052-07-2
                   211052-11-8
                                 220323-11-5
                                              220323-13-7
                                                             220323-16-0
     220323-18-2
                   220323-19-3
                                 220323-20-6
        (silver halide color photog.
        material contg. 3-pyrazolidone deriv. and cyan
        coupler with low pKa to improve developability)
IT
     202483-63-4P
        (silver halide color photog.
        material contg. 3-pyrazolidone deriv. and cyan
        coupler with low pKa to improve developability)
IT
     194419-30-2P
        (silv r halid color photog.
        material contg. 3-pyrazolidone deriv. and cyan
        coupler with low pKa to improve developability)
IT
     100-63-0, Phenylhydrazine
                                 105-34-0, Methyl cyanoacetate
     15159-40-7, 4-Morpholinecarbonyl chloride
```

(silver halide color photog.
material contg. 3-pyrazolidone deriv. and cyan
coupler with low pKa to improve developability)

L25 ANSWER 23 OF 39 HCA COPYRIGHT 2003 ACS
130:160604 Color photographic film containing nondiffusible colorless carboxylic acid and showing good pressure resistance.
Yokosawa, Akihito (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11007109 A2 19990112 Heisei, 52 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-175160 19970617.

The material comprises a reflective support laminated with a waterproof resins from both sides, an emulsion layer contg. .gtoreq.95 mol% (based on the total Ag halide)

AgCl and contg. a Group VIII metal, and a hydrophilic colloid layer contg. a pyrroloazole cyan coupler

I (R1, R2 = alkyl, aryl; R3-5 = H, alkyl, aryl; R6 = substituent; X = heterocycle, amino, aryl; Z = metal-free ring; Y = H, group leaving upon reaction with an oxidized developer) and a nondiffusible nonchromogenic colorless carboxylic acid (salt). The support has a lamination layer contg. .gtoreq.18 wt.% (based on the waterproof resin) white pigment on the emulsion side. The material shows rapid developability and provides sharp images with good color reprodn.

IT 184947-09-9P

(cyan coupler; pressure-resistant color
photog. film contg. nondiffusible colorless carboxylic
acid)

RN 184947-09-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[(di-2propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

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IC
     ICM G03C007-38
     ICS G03C001-035; G03C001-09; G03C001-91; G03C007-00; G03C007-392
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
ST
     pyrroloazole cyan coupler photog film;
     iron iridium contg photog emulsion sensitivity;
     nondiffusible nonchromogenic colorless carboxylic acid
    photog; sharpness photog film silver
     chloride content; titania white waterproof coating
    photog support
IT
    Photographic emulsions
       Photographic films
        (color; pressure-resistant color photog. film contq.
        nondiffusible colorless carboxylic acid)
IT
     Cyan couplers
        (pressure-resistant color photog. film contg.
        nondiffusible colorless carboxylic acid)
IT
     Group VIII elements
        (sensitizer; pressure-resistant color photog. film
        contq. nondiffusible colorless carboxylic acid)
IT
     Coating materials
        (water-resistant, white, on photog. support;
        pressure-resistant color photog. film contg.
        nondiffusible colorless carboxylic acid)
IT
     Pigments, nonbiological
        (white; pressure-resistant color photog. film contg.
        nondiffusible colorless carboxylic acid)
     184947-09-9P 188745-52-0P
IT
        (cyan coupler; pressure-resistant color
        photog. film contq. nondiffusible colorless carboxylic
        acid)
IT
     178743-91-4
                   179330-29-1
        (cyan coupler; pressure-resistant color
        photog. film contg. nondiffusible colorless carboxylic
     7439-88-5, Iridium, uses 7439-89-6, Iron, uses
                                                         7440-18-8,
TT
    Ruthenium, uses
        (emulsion sensitizer; pressure-resistant color photog.
```

film contq. nondiffusible colorless carboxylic acid)

IT 190436-30-7P 194419-30-2P 219952-45-1P 219952-46-2P (in prepn. of nondiffusible colorless carboxylic acid for color photog. film with good color reprodn.)

IT 105-34-0, Methyl cyanoacetate 7726-95-6, Bromine, reactions 15159-40-7, 4-Morpholinecarbonyl chloride 25761-72-2, Diallylcarbamoyl chloride 163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4

(in prepn. of nondiffusible colorless carboxylic acid for color photog. film with good color reprodn.)

IT 112-80-1, Oleic acid, uses 5377-19-5 50772-35-5 212118-88-2 220202-49-3

(nondiffusible compd.; pressure-resistant color photog. film contg. nondiffusible colorless carboxylic acid)

L25 ANSWER 24 OF 39 HCA COPYRIGHT 2003 ACS

130:146176 Silver halide photographic

material containing transition metal complex and pyrazolidone to reduce pressure effect. Nakadaira, Shinichi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11007110 A2 19990112 Heisei, 61 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-175161 19970617.

GI

$$R^{1}$$
 R^{2}
 N
 N
 N
 R^{6}
 R^{6}
 R^{7}
 R^{1}
 R^{2}
 R^{2}
 R^{3}
 R^{4}
 R^{5}
 R^{6}
 R^{7}
 R^{6}

The photog. material has .gtoreq.1 hydrophilic colloid layer contg. (A) Ag halide particles (
AgCl content .gtoreq.90 mol%) including complex(es) of Fe,
Ru, Re, Os, and/or Ir, (B) a pyrroazole cyan
coupler I (Za, Zb = CR3:, N:; R3 = H, substituent; Za
.noteq. Zb; R1, R2 = electron-withdrawing group showing the
Hammett's .sigma.p .gtoreq.0.20 where the sum of .sigma.p for R1 and
R2 .gtoreq.0.65; X = H, leaving group by coupling reaction

with oxidized color developer), and (C) a pyrazolidone deriv. II (R3, R4 = H, aryl, C1-30 alkyl; R5, R6 = H, alkyl, aryl; R7 = aryl). It shows good develop ability and color reprodn. quality, and is resistant to pressure effect, consequently it is suitably used as multilayer color papers.

IT 188745-52-0

(cyan coupler; color photog.

material contg. transition metal complex and pyrazolidone to reduce pressure effect)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C001-035; G03C001-09; G03C007-00; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog film multilayer pressure resistance; pyrroazole cyan coupler photog film; pyrrotriazole cyan coupler photog material; condensed pyrrole coupler photog material

IT Cyan couplers

(color **photog**. material contg. transition metal complex and pyrazolidone to reduce pressure effect)

IT Photographic films

(color; color **photog**. material contg. transition metal complex and pyrazolidone to reduce pressure effect)

IT 13746-66-2, Tripotassium hexacyanoferrate 15002-31-0, Tetrapotassium hexacyanoruthenate 16920-56-2, Dipotassium hexachloroiridate 20740-36-7, Tetrapotassium hexacyanoosmate 20792-41-0, Tripotassium hexacyanoiridate 25443-63-4, Tripotassium hexachlororuthenate(3-) 202483-63-4 211051-96-6 220009-78-9 (color **photog**. material contg. transition metal complex and pyrazolidone to reduce pressure effect)

IT 188745-52-0 200137-20-8

(cyan coupler; color photog.

material contg. transition metal complex and pyrazolidone to reduce pressure effect)

L25 ANSWER 25 OF 39 HCA COPYRIGHT 2003 ACS

130:73773 Silver halide color photographic

material. Saito, Naoki; Mikoshiba, Hisashi; Morigaki, Masakazu; Soejima, Shin; Yoshioka, Yasuhiro; Takahashi, Osamu (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 883024 Al 19981209, 93 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB; GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1998-109978 19980602. PRIORITY: JP 1997-144168 19970602.

GI

Asilver halide color photog. material comprises a support having provided thereon at least one hydrophilic colloid layer, wherein the silver halide color photog. material contains a coupler represented by the formula I wherein R1 and R2 each represents an alkyl group or an aryl group; R3, R4 and R5 each represents a hydrogen atom, an alkyl group or an aryl group; Z represents a nonmetallic at. group necessary to form a satd. ring; R6 represents a substituent; X represents a heterocyclic group, a substituted amino group or an aryl group and Y represents a hydrogen atom or a group capable of being released upon color development and a non-color-forming colorless cyclic imide compd. having a diffusion-resistant group. The silver halide color photog.

material has an excellent color-forming property to provide a color

image of high max. color d. and good color reproducibility.
178743-95-8

(cyan photog. coupler to be used in combination with cyclic imide compds. having diffusion-resistant groups in color photog. emulsions)

RN 178743-95-8 HCA

IT

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[[bis(2-cyanoethyl)amino]carbonyl]oxy]-6-cyano-2-[2-methoxy-5[(methylsulfonyl)amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-388

ICS G03C007-38; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog emulsion colorless cyclic imide; pyrrolotriazole cyan coupler color photog emulsion

IT Photographic emulsions

(color; contg. pyrrolotriazole color formers and cyclic imide compds. having diffusion-resistant groups)

IT Cyan couplers

(pyrrolotriazoles for use in combination with cyclic imide compds. having diffusion-resistant groups)

IT 41608-33-7, 2-Tetradecyloxybenzoic acid 77514-47-7 217456-52-5 217456-53-6 217456-54-7 217456-55-8 217456-56-9 217456-57-0 (color photog. emulsions contg. pyrrolotriazole cyan couplers and)

IT 178743-95-8 178743-96-9 183744-82-3

200049-62-3 200049-63-4 200110-89-0

(cyan photog. coupler to be used in

combination with cyclic imide compds. having diffusion-resistant groups in color **photog**. emulsions)

IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P (prepn. and reaction in prepg. cyan photog. coupler)

IT 188745-52-0P 217456-51-4P

(prepn. and use as cyan photog.

coupler to be used in combination with cyclic imide compds. having diffusion-resistant groups in color photog . emulsions)

IT 5377-19-5P, 2-Hexadecyloxybenzoic acid 88249-84-7P 112900-90-0P 158574-65-3P

(prepn. and use in color **photog**. emulsions contg. pyrrolotriazole **cyan couplers**)

IT 15159-40-7, 4-Morpholinecarbonyl chloride 25761-72-2, Diallylcarbamoyl chloride 163119-16-2 194419-32-4 (reaction in prepg. cyan photog.

coupler)
IT 184947-09-9

(reaction in prepg. cyan photog.
coupler)

L25 ANSWER 26 OF 39 HCA COPYRIGHT 2003 ACS

129:209275 Silver halide color photographic
material containing pyrrolotriazole derivative cyan
coupler and carboxylic acid compound. Saito, Naoki;
Morigaki, Masakazu; Yoshioka, Yasuhiro; Soejima, Susumu; Takahashi,
Osamu; Mikoshiba, Takashi (Fuji Photo Film Co., Ltd., Japan). Jpn.
Kokai Tokkyo Koho JP 10221825 A2 19980821 Heisei, 74 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-23021 19970205.

$$(R^{53})_{r}$$

$$CO_{2}M$$

$$OR^{51}$$

$$OR^{52})_{q}$$

$$I$$

$$R^{1} R^{3}$$

$$XCO_{2}$$

$$N$$

$$NY R^{2} R^{4}$$

$$R^{6}$$

$$R^{1} R^{3}$$

$$R^{5}$$

$$R^{5}$$

$$R^{6}$$

$$R^{1} R^{3}$$

$$R^{6}$$

$$R^{1} R^{3}$$

The material contains a nondiffusive non-coloring colorless compd. I [R51-52 = (substituted) alkyl, aryl, acyl, carbamoyl, alkoxycarbonyl; R53 = halo, (substituted) alkyl, aryl, acyl, carbamoyl, alkoxycarbonyl, sulfonyl, sulfamoyl,; M = H, metal atom, ammonium; q = 0-2; r = 0-4; p + r .ltoreq.4; .gtoreq.1 of R51-53 = C8-22 nondiffusive group] or its salt in a hydrophilic colloid layer. The material contains a nondiffusive non-coloring colorless compd. or its salt and a coupler II [R1-2 = alkyl, aryl; R3-5 = H, alkyl, aryl, Z = nonmetal atoms to form satd. ring; R6 = substituent; X = heterocycle, (substituted) amino, aryl; Y = H, a releasing group by developing process] in the same or different hydrophilic colloid layer(s). The material shows good coloring property and color reprodn.

```
IT
     184947-09-9P
        (photog. film contg. nondiffusive carboxylic acid
        compd. and pyrrolotriazole deriv. cyan coupler
     184947-09-9 HCA
RN
     1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
CN
     6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[(di-2-
     propenylamino) carbonyl] oxy] -, 2,6-bis(1,1-dimethylethyl) -4-
     methylcyclohexyl ester (9CI) (CA INDEX NAME)
                            CH_2 - CH = CH_2
                        -C-N-CH_2-CH=-CH_2
t-Bu
```

HN

```
0
                                    t-Bu
IC
     ICM G03C007-388
         G03C007-00; G03C007-38
     ICS
     74-2 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
ST
    photog nondiffusive carboxylic acid compd; pyrrolotriazole
    cyan coupler photog film
IT
    Cyan couplers
       Photographic films
        (photog. film contq. nondiffusive carboxylic acid
        compd. and pyrrolotriazole deriv. cyan coupler
     51834-16-3P, Monohexadecyl phthalate
                                            212118-88-2P
IT
        (photog. film contg. nondiffusive carboxylic acid
        compd. and pyrrolotriazole deriv. cyan coupler
     57-10-3, Hexadecanoic acid, uses 2027-47-6, 9-Octadecenoic acid
IT
                 17181-26-9, Monooctadecyl phthalate
                                                       22890-21-7
     2312-15-4
                                          109591-76-6
                               54680-48-7
                                                         212118-85-9
     36753-13-6
                  50772-35-5
                                               212118-90-6
     212118-86-0
                   212118-87-1
                                 212118-89-3
                                                             212118-91-7
     212118-92-8
        (photog. film contq. nondiffusive carboxylic acid
        compd. and pyrrolotriazole deriv. cyan coupler
     184947-09-9P 188745-52-0P
IT
        (photog. film contq. nondiffusive carboxylic acid
        compd. and pyrrolotriazole deriv. cyan coupler
IT
     178743-95-8 178743-96-9
                               179330-29-1
     200049-63-4 200110-89-0 200216-40-6
```

(photog. film contg. nondiffusive carboxylic acid compd. and pyrrolotriazole deriv. cyan coupler
)

IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P (prepn. of pyrrolotriazole deriv. photog. cyan coupler)

IT 372-09-8, Cyanoacetic acid 25761-72-2, Diallylcarbamoyl chloride 163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4 (prepn. of pyrrolotriazole deriv. photog. cyan coupler)

L25 ANSWER 27 OF 39 HCA COPYRIGHT 2003 ACS
128:250641 Color image formation using silver
halide color photographic photosensitive
materials. Kimura, Keizo; Hirano, Shigeo; Shimada, Yasuhiro (Fuji
Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10062926 A2
19980306 Heisei, 69 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1996-218903 19960820.

GI

AB The title materials, comprising a support coated with .gtoreq.1

Ag halide emulsion layer contg. .gtoreq.1

cyan coupler I [R1 = substituent; R2 = aliph.

group; R3 = H or XCO2 (X = heterocycle, substituted amino, aryl); Y

= H or substituent], are color-developed in the presence of
 .gtoreq.1 p-phenylenediamine-type color developing agent of the
 formula II [R1-6 = H or substituent, in .gtoreq.1 of the groups R1
 and R2, R3 and R4, and R5 and R6 the both are substituents; R7 =
 alkyl, aryl, heterocycle; R8 = substituent; n = 0-3] to form color
 images. High color quality images with good
 lightfastness and thermal resistance and without residual color
 stain are obtained.

IT 188745-52-0P

(coupler; color photog. emulsion contg.
condensed polycyclic heterocycle cyan coupler
and p-phenylenediamine developer)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38
ICS G03C007-00; G03C007-413

CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

silver halide photog color
cyan coupler; condensed polycyclic heterocycle
cyan coupler; phenylenediamine developer
cyan coupler photog emulsion;
lightfastness color photog cyan coupler
; heat fastness color photog cyan
coupler

IT Cyan couplers

Heat-resistant materials Light-resistant materials

Photographic developers

(color **photog**. emulsion contg. condensed polycyclic heterocycle **cyan coupler** and p-phenylenediamine developer)

IT 15159-40-7, Morpholinocarbonyl chloride 163119-16-2, 2,6-Di(tert-butyl)-4-methylcyclohexanol 194419-32-4 (color photog. emulsion contg. condensed polycyclic heterocycle cyan coupler from)

IT 188745-52-0P

(coupler; color photog. emulsion contg. condensed polycyclic heterocycle cyan coupler and p-phenylenediamine developer)

IT 194419-26-6 194419-27-7 204757-08-4 204757-09-5 204757-10-8

(coupler; color photog. emulsion contq. condensed polycyclic heterocycle cyan coupler and p-phenylenediamine developer) 171662-44-5 171662-53-6 200346-13-0 200346-16-3 IT 171662-48-9 204757-11-9 204757-12-0 (developer; color **photog**. emulsion contg. condensed polycyclic heterocycle cyan coupler and p-phenylenediamine developer) IT 194419-30-2P 194419-31-3P 190436-30-7P (intermediates; color photog. emulsion contg. condensed polycyclic heterocycle cyan coupler from) ANSWER 28 OF 39 HCA COPYRIGHT 2003 ACS 128:186456 Silver halide color photographic material containing AgCl-dominant tabular grains. Kobayashi, Hidetoshi; Shimada, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10020431 A2 19980123 (Japanese). CODEN: JKXXAF. APPLICATION: JP Heisei, 78 pp. 1996-188083 19960701. Claimed color photog. material has .gtoreq.1 red-sensitive AB Ag halide emulsion layers contg. (1) chloride-dominant tabular grains (aspect ratio 2-25, and the AgCl content 60-100 mol%) in the amt. of .gtoreq.50% of total grain-projected areas and (2) a 2-equiv. coupler(s) in the amt. of 70-100 mol% of total cyan couplers The tabular grains preferably comprises the surfaces of (100) major planes. The material has a good balance of the 3 color gradations, and the balance is insensitive to pH variation of the developer soln. Thus, a multilayer color neg. film was prepd. utilizing (1) AgCl emulsions for light-sensitive layers including the 2 red-sensitive layers, and (2) 2-ethoxycarbonyl-3phenyl-5-chloro-6-cyano-7-(2,6-di-tert-butyl-4-methylcyclohexyloxycarbonyl)-pyrrolo[1,2d]imidazole for both of the 2 red-sensitive layers as the sole cyan coupler. 203067-28-1 IT (coupler; color photog. material contg. AgCl-dominant tabular grains and two-equiv. cyan coupler to improve color balance) RN203067-28-1 HCA 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, CN 2-[3-[[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]p henyl]-6-cyano-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

coupler to improve color balance)

IT 920-37-6 2425-77-6 3044-06-2 54153-51-4 146822-26-6 146822-27-7 146822-28-8 146822-29-9 150172-54-6 151019-65-7 151645-01-1

(reaction of, cyan coupler from; for color photog. material contg. AgCl-dominant tabular grains)

L25 ANSWER 29 OF 39 HCA COPYRIGHT 2003 ACS

128:174065 Silver halide color photographic

material having red-sensitive layer with some blue/green sensitivity, and the **image**-forming process. Hayashi, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10020462 A2 **19980123** Heisei, 45 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-186895 19960628.

GI

$$\begin{array}{c|c}
R^1 & R^2 \\
R^4R^6NCOO & N & NH \\
 & | & | \\
 & Za = Zb & I
\end{array}$$

AB Claimed color **photog**. material is characterized by (1) that .gtoreg.1 of cyan-coupler-contg. red-sensitive layer(s) contains, in the amt. of .gtoreq.50% of total grain-projected areas, AgCl-dominant grains (AgCl content .gtoreq.95 mol%) comprising (100) surfaces as the major plane and spectrally sensitized by red-sensitizing and green- and/or blue-sensitizing dyes, and (2) that the cyan coupler incorporated in the layer(s) is represented by the formula I (Za = -CR3:, -N:; when Za = -N:, Zb = CR3, and when Za = -CR:, Zb = -N:; R1, R2 = electron-attractive group with Hamet's sigma const. of 0.2-1.0; R3 = substituent; R4, R5 = H, aliph., aryl, heterocyclic group; R4 and R5 may be combined to form a ring). claimed is the image-forming process in which the photog. material is exposed by a scanning mode, followed by chromogenic development. Preferable scanning procedure is by laser beam scanning. It has rapid developability and good storage stability, and particularly it improves color reprodn. quality of shadow details, which is prone to be insufficient when the coupler provides cyan color with high purity. Thus, a multilayer color neg. film comprising AgCl -dominant emulsion layers was added by 2-tert-butyl-5diethylaminocarbonyloxy-6-cyano-7-(2,6-di-tert-butyl-4-methylcyclohexyloxycarbonyl)-pyrrolo[1,2d]imidazole in both low and high

speed red-sensitive layers which were spectrally sensitized to red and somewhat to green.

IT 184773-62-4

(coupler; color photog. material having red-sensitive layer with some blue/green sensitivity for scanning-mode processing)

RN 184773-62-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C001-00; G03C001-035; G03C001-09; G03C001-12; G03C005-08; G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrroloazole cyan coupler photog
material; pyrrolotriazole cyan coupler
photog material; spectral sensitization color photog
material; scanning mode processing photog material
IT Photographic emulsions

Photographic emulsions
(color photog. material having red-sensitive
AgCl-dominant emulsion layer with some blue/green
sensitivity)

IT Cyan couplers

Photographic processing

(color **photog**. material having red-sensitive layer with some blue/green sensitivity for scanning-mode processing)

IT Photographic sensitizers

(spectral; color **photog**. material having red-sensitive layer with some blue/green sensitivity for scanning-mode

processing)

IT 178744-03-1 **184773-62-4 188745-52-0**

202927-10-4 **202927-11-5** 202927-12-6 202927-13-7

202927-14-8 202927-15-9 202927-16-0

(coupler; color photog. material having

red-sensitive layer with some blue/green sensitivity for

scanning-mode processing)

IT 41665-49-0 90895-32-2 102731-88-4 178888-89-6 202927-17-1D, deriv

(dye; color **photog**. material having red-sensitive layer with some blue/green sensitivity for scanning-mode processing)

L25 ANSWER 30 OF 39 HCA COPYRIGHT 2003 ACS

128:134335 Silver halide color photographic

material using novel cyan coupler. Kawai,

Hiroshi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho

JP 10003147 A2 19980106 Heisei, 38 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1996-157034 19960618.

GI

NC
$$CO_2$$
 Z R^5 R^6 R^6 R^6 R^6 R^6

AB The title material, possessing photog. constitutive layers comprising yellow, magenta, and cyan-coloring Ag halide emulsion layers and .gtoreq.1 non-photosensitive hydrophilic layer on a support, contains .gtoreq.1 cyan -coloring coupler I [R1-5 = H or substituent; Z = (substituted) nonmetal atoms required to form a ring; X =heterocycle, (substituted) amino of which the substituents may link to form a ring, aryl; Y = H or substituent; R6 = substituent] in the cyan-coloring layer and an antioxidant with mol. wt. .ltoreq.330 in .gtoreq.1 of the constitutive layers. The material shows good color reproducibility and stable photog. properties independent of the variation in processing even after storage for long periods of time. Thus, a multilayer color **photog**. film was prepd. by using a red-sensitive Ag(Br,Cl) emulsion layer contq. II and an UV-absorbing layer contq. ascorbic acid for the antioxidant.

IT 200111-37-1

(triazole deriv. photog cyan coupler
)

RN 200111-37-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylphenylester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C007-00; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST cyan coupler triazole deriv photog;

antioxidant **photog** film

IT Antioxidants

(photog. film contg. antioxidant)

L25 ANSWER 31 OF 39 HCA COPYRIGHT 2003 ACS 128:68433 Silver halide photographic

material containing pyrrolotriazole **coupler** and amine.
Morigaki, Masakazu; Mikoshiba, Hisashi; Yoneyama, Hiroyuki (Fuji
Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09288339 A2
19971104 Heisei, 65 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1996-126445 19960423.

GI

AB Claimed photog. material has a layer contg. (1) a pyrrolotriazole coupler I (R1-5 = H, substituent; Z = non-metal ring; X = heterocyclic group, amino, aryl; R6 = substituent; Y = H, substituent) and (2) a compd. Ra10LNRa2Ra3, where Ra1, Ra2, and Ra3 are alkyl, alkenyl, aryl, heterocyclic group; L = arylene or single bond; Ra1 and L, Ra2 and L, Ra3 and L, Ral and Ra2, Ra2 and Ra3, Ral and Ra3 may be combined to form 5-7-membered ring; Ra3 may also be H. It has good color reprodn. quality, good dye stability and provides an image with low cyan and yellow dye stains. Thus, in a multilayer color paper, coupler I (R1-5 and Z = 2,6-di-tert.-butyl-4methylcyclohexyl; R6 = 4-tert.-butylphenyl; Y = H; X = morpholine-4-yl) and 1-methoxy-2,2,6,6-tetramethyl-4-tetradecoylpiperidine were incorporated to provide the mentioned advantages. IT 200216-39-3

(photog. material contg. pyrrolotriazole
coupler and amines to reduce yellow and cyan
stains)

RN 200216-39-3 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,
5-[[[bis(methoxymethyl)amino]carbonyl]oxy]-2-[3-chloro-4-[[1,4-dioxo-4-(tetradecyloxy)butyl]amino]phenyl]-6-cyano-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IC ICM G03C007-38

ICS C07D487-04; G03C007-00; G03C007-388; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

pyrrolotriazole cyan coupler photog
material; amine additive color photog material;
piperidinyl compd additive photog material

IT Color photographic paper

Cyan couplers

(photog. material contg. pyrrolotriazole coupler and amines to reduce yellow and cyan stains)

IT Amines, uses

(photog. material contg. pyrrolotriazole
coupler and amines to reduce yellow and cyan
stains)

- IT 2516-92-9 40289-91-6 129607-55-2 188574-29-0 200216-42-8 200216-43-9 200216-44-0 200216-45-1 200216-46-2 200216-48-4 200216-49-5 200216-50-8 200216-51-9 200216-55-3 200277-24-3 200277-28-7 200277-35-6 200277-40-3 200277-46-9 (photog. material contg. pyrrolotriazole coupler and amines to reduce yellow and cyan stains)
- IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P (pyrrolotriazole coupler from; for photog. materials)
- L25 ANSWER 32 OF 39 HCA COPYRIGHT 2003 ACS
 127:270436 Silver halide color photographic
 material and manufacture of color filter using it. Mizukawa,
 Hiroki; Igarashi, Tatsuya; Hirai, Hiroyuki (Fuji Photo Film Co.,
 Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09218494 A2
 19970819 Heisei, 81 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 1996-45571 19960208.

GΙ

$$- OCO = R^4p = Q^4$$

$$--NR^5CO - R^4p = Q^5$$

$$-NR^{5}SO_{2} - R^{4}p = Q6$$

AB The title material contains .gtoreq.2 polymer couplers selected from: (a) copolymers of .gtoreq.1 yellow coupler monomer Q1L2jL1iCR1:CH2 [I; R1 = H, Cl, alkyl, aryl; L1 = CONR2, CO2, NR2CO, OCO, Q4-6 (R4 = substituent; R5 = H, alkyl, aryl, heterocycle, p = 0-4); L2 = divalent linking group; i, j = 0 or 1; Q1 = yellow coupler residue forming a yellow dye upon coupling with oxidized color developing agents] with .gtoreq.1 magenta coupler monomer Q2L4hL3gCR3:CH2 (II; R3, L3, L4, g, and h are same meanings as R1, L1, L2, i, and j, resp.: Q2 = magenta coupler residue forming a magenta dye upon coupling with oxidized color developing agents) and optional .gtoreq.1 non-coloring monomer having .gtoreq.1 ethylene group which has no ability of coupling with oxidized color developing agents; (b) copolymers of .gtoreq.1 I with .gtoreq.1 cyan coupler monomer Q3L6nL5mCR6:CH2 (III; R6, L5, L6, m, and n are same meanings as R1, L1, L2, i, and j, resp.; Q3 = cyan coupler residue forming a cyan dye upon coupling with oxidized color developing agents) and the optional .gtoreq.1 non-coloring monomer; and (c) copolymers of .gtoreq.1 II with .gtoreq.1 III and the optional .gtoreq.1 non-coloring monomer. The material for color filter comprising a support coated with .gtoreq.3 different color-sensitive Ag halide emulsion layers, contains .gtoreq.2 of the polymer The material is patternwise exposed and subjected couplers. to color development and desilvering to give a color filter with

blue, green, and red pixel patterns and black matrix. The color filter prepd. by the above process is also claimed. The materials provides high quality **images** with good thermal resistance and lightfastness useful for color filters.

IT 196100-43-3

CN

(silver halide photog. film contg.

polymer coupler for manuf. of color filter)

RN 196100-43-3 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester, polymer with N-[3-[6-(1,1-dimethylethyl)-7-(1H-pyrazol-1-yl)-1H-pyrazolo[1,5-b][1,2,4]triazol-2-yl]phenyl]-2-propenamide and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 194280-62-1 CMF C37 H48 N6 O6

CM 2

CRN 189814-83-3 CMF C20 H21 N7 O

L25 ANSWER 33 OF 39 HCA COPYRIGHT 2003 ACS
127:72946 Silver halide color photographic

material with improved fog resistance. Makuta, Toshiyuki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09127660 A2 **19970516** Heisei, 85 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-309749 19951106.

GI

ACOCHCONH

$$X^1$$
 $R^{20}COCHCONH$
 X^2
 X^2
 X^1
 X^2
 X^2
 X^2
 X^2
 X^2
 X^2
 X^2
 X^2
 X^2
 X^2

$$X^{-1}$$
 X^{-1}
 X

AB The title material contains a yellow coupler(s) I (A = tert-alkyl, tert-cycloalkyl, aliph. heterocyclyl; aryl, indolyl; W = halo, alkoxy, aryloxy, alkyl, acyloxy, dialkylamino; X1 = H, substituent; Y1 = acylamino, alkoxy, sulfoneamido, carbamoyl, sulfamoyl, alkoxycarbonyl, sulfonyl; R11 = H, alkyl, cycloalkyl, acyl, sulfonyl; R12, R13 = H, alkyl, alkoxy, sulfonyl) and/or II (R20 = tert-alkyl, tert-cycloalkyl, aliph. heterocyclyl, aryl, indolyl; X2 = group capable of leaving upon reaction with color developer; Y2 = halo, alkoxy, aryloxy, acyloxy, dialkylamino, alkyl; Z = NHCOR21, NHCOOR22, NHCOL1OCOR23, NHPOR24R25, NHCOL2SR26, NHCOL3COOR27, NHCOL4NR28COR29, NHCOL5CONR30R31; R21 = alkenyl, haloalkyl, haloalkenyl; R22 = alkyl, cycloalkyl, alkenyl, aryl; L1 = alkylene; R23 = alkyl, cycloalkyl, alkenyl, aryl; R24, R25 = alkyl, cycloalkyl, aryl, alkoxy, aryloxy, alkylamino, dialkylamino, anilino; L2 = alkylene; R26 = alkyl, aryl; R27 = alkyl, aryl; L4 = alkylene; R28 = H, alkyl, aryl; R29 = alkyl, aryl; L5 = alkylene; R30, R31 = H, alkyl, aryl) and a cyan coupler(s) III (Zm, Zn = CR43, N; R41, R42 = electron with drawing group; R43 = substituent; X = H, group capable of leaving upon coupling reaction with oxidized color developer).

IT 184773-62-4

(photog. cyan coupler for improving
fog resistance)

RN 184773-62-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-,
2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

Me Bu-t NC NH S O O (CH₂)
$$_7$$
 Me t-Bu

IC ICM G03C007-36

ICS G03C007-00; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog material;

cyan coupler yellow acetanilide pyrroloazole

IT Photographic paper

Yellow couplers

(silver halide color photog.

material with improved fog resistance)

IT 165178-13-2 **184773-62-4 188745-52-0**

191274-16-5

(photog. cyan coupler for improving

fog resistance)

IT 176218-64-7 176218-72-7 176533-54-3 178873-41-1 181213-60-5

184483-61-2 187102-27-8 187102-28-9 191274-09-6

(photog. yellow coupler for improving fog

resistance)

L25 ANSWER 34 OF 39 HCA COPYRIGHT 2003 ACS

126:270343 Silver halide color photographic

materials and image forming method. Matsuda, Naoto; Ito,

Takayuki; Saito, Naoki (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai

Tokkyo Koho JP 09043790 A2 19970214 Heisei, 61 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-210209 19950727.

GI

- Claimed photog. materials have .gtoreq.1 red-sensitive layers contg. cyan couplers I [Za, Zb = CH(R2) or N; Za .noteq. Zb; R1 = electron-absorbing group; R2 = substituent; X = H or leaving group to be released by coupling reaction with oxidized developing agents; R3, R4 = aliph; R5-7 = H or aliph.; Z = ring-forming group] and .gtoreq.1 layers contg. phenol derivs. II (R21 = alkyl, aryl; R22 = substituent; m = 0-4) and colorless couplers which react with oxidized arom. primary amine developers and do not contribute to image formation. Claimed process comprises black-and-white development followed by treatment with color developers at pH .gtoreq.11. The materials provide good color reprodn. and high-quality images.
- IT 184773-62-4

(cyan coupler; photog. materials contg. pyrroloazole compds. and image forming method for good color reprodn.)

- RN 184773-62-4 HCA
- CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

Me
$$\frac{\text{Me}}{\text{C}-\text{CH}_2-\text{CMe}_3}$$

Me $\frac{\text{NH}-\text{C}-\text{CH}_2-\text{CMe}_3}{\text{O}-\text{(CH}_2)_7-\text{Me}}$

IC ICM G03C007-38

G03C005-50; G03C007-00; G03C007-26; G03C007-392; G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog material phenol deriv; pyrroloazole

cyan coupler photog Photographic films

IT

(color; photog. materials contq. pyrroloazole compds.

and image forming method for good color reprodn.)

IT Cyan couplers

Photographic development

(photog. materials contg. pyrroloazole compds. and

image forming method for good color reprodn.)

IT 101664-24-8 158718-69-5 163674-27-9 188745-56-4 188745-58-6 (colorless coupler; photog. materials contq.

> pyrroloazole compds. and image forming method for good color reprodn.)

178743-91-4 **184773-62-4 188745-52-0** IT 165178-14-3 188745-53-1

(cyan coupler; photog. materials

contq. pyrroloazole compds. and image forming method for good color reprodn.)

IT 188745-54-2 188745-55-3

> (photog. materials contq. pyrroloazole compds. and image forming method for good color reprodn.)

ANSWER 35 OF 39 HCA COPYRIGHT 2003 ACS

126:218497 Silv r halide color photographic

material containing amide compounds, and the image-forming method. Kase, Akira (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 09015802 A2 19970117 Heisei, 58 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-185029 19950629.

ΙI

AΒ Claimed photog. material is characterized by that the cyan coupler-contg. layer contains (1) a pyrroloazole I (Za = N: and Zb = CR3:, or Zb = N: and Za = CR3:; R1, R2 = electron-attracting group with the Hamet's sigma const. between 0.2 and 1.0; R3 = substituent; X = H, leaving group to be released by the coupling reaction with the oxidized color developing agent) or an acylaminophenol II (R11 = aliph., arom., heterocyclic group, or arom. or heterocyclic amine; R12 = aliph. group, acylamino; R13 = H, halo, aliph., arom. or acylamino group; R11 and R13 may be combined to form a ring; Z11 = H, leaving group to be released by the coupling reaction with the oxidized color developing agent) and (2) a cyclic amide III (Q = nonmetallic at. groups necessary to form a 5- to 7-membered ring; R11a = alkyl, aryl, alkoxy) or an amidobenzene IV (R21 = H, alkyl; R22 = H, alkyl, alkoxy, aryl; R23 = H, alkyl, alkoxy, aryl, halo, acylamino, sulfoamido). Preferable compds. III are N, N-di-acyl-piperadines, and compds. IV are diacylaminobenzenes. An image-forming method by imagewisely exposing the material to scanning light of .ltoreq.10-4 s followed by chromogenic development is also claimed. Preferable processing time is within 90 s on dry-to-dry basis. has a good cyan image stability by preventing reductive dye fading reaction. Thus, a multilayer color paper contg. a cyan coupler of 2-acylaminophenol type and N, N-di-[2-(2-chloro-4-tert-pentyl-phenoxy) heptoyl]piperadine [or N-(m-pentadecylbenzo)morpholine had the mentioned advantages. IT 184773-62-4

(cyan coupler; color photog.

material contg. acylaminophenol or pyrroloazole coupler and amide compds., and the image-forming method)

RN 184773-62-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

Me Bu-t NC NH S O O (CH₂)
$$_{7}$$
 Me t-Bu

IC ICM G03C007-392

ICS G03C007-392; G03C005-08; G03C007-00; G03C007-26; G03C007-30; G03C007-34; G03C007-38; G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

silver halide color photog material; cyclic amido additive photog material; amido image stability photog material; acylaminobenzene additive color photog material; acylaminophenol cyan coupler photog material; pyrroloazole cyan coupler photog material

IT Cyan couplers

Photographic paper

Photographic stabilizers

(color **photog**. material contg. acylaminophenol or pyrroloazole **coupler** and amide compds., and the **image**-forming method)

IT 31037-84-0 92589-17-8 99661-33-3 178743-91-4 184773-62-4

(cyan coupler; color photog.

material contg. acylaminophenol or pyrroloazole coupler

and amide compds., and the **image**-forming method)

IT 4629-02-1 166893-42-1 181180-37-0 187942-51-4 187942-52-5

(image stabilizer; color photog. material contg. acylaminophenol or pyrroloazole coupler and amide compds., and the image-forming method)

L25 ANSWER 36 OF 39 HCA COPYRIGHT 2003 ACS

126:52818 Silver halide photographic

photosensitive material and **image** formation. Yokozawa, Akihito (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08278613 A2 **19961022** Heisei, 54 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-107869 19950407.

GI

The material comprises a support, a photosensitive Ag halide emulsion layer contg. a cyan coupler I [Za = C(R3), N; Zb = C(R3) when Za = N; R1-2 = electron attractive group having Hamett's substitution group value .sigma.p = 0.20-1.0; X = H or group released by coupling reaction with oxidized color developer; R3 = substitution group] and Ag halide emulsion contg. .gtoreq.95 mol%

AgCl, and a compd. II (R4, R6 = electron attractive group having .sigma.p .gtoreq.0.3; R5, R7 = alkyl, aryl; L1-5 = methyne; M1 = H, monovalent cation or metal; .gtoreq.1 of L1-5 has a substitution group) in a layer constituting the material. The material is scanning exposed to a light, and then color developing treated. The material can be quickly processed, and has stable color d. during continuously processing.

II

IT 184773-62-4

(cyan coupler; silver
halide photog. photosensitive material contg.
pyrazolotriazole cyan coupler)

RN 184773-62-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

ICS G03C001-035; G03C001-83; G03C005-08; G03C007-00; G03C007-407; G03C007-44

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog cyan coupler pyrazolotriazole

IT Photography

(dyes; silver halide photog.

photosensitive material contg. pyrazolotriazole cyan coupler)

IT Cyan couplers

Dyes

(silver halide photog.

photosensitive material contg. pyrazolotriazole cyan coupler)

IT 178743-91-4P

(cyan coupler; silver

halide photog. photosensitive material contg.

pyrazolotriazole cyan coupler)

IT 165178-13-2 **184773-62-4 184947-09-9**

(cyan coupler; silver

halide photog. photosensitive material contq.

pyrazolotriazole cyan coupler)

IT 184947-10-2 184947-11-3 184947-12-4 184947-13-5

(dye; silver halide photog.

photosensitive material contg. pyrazolotriazole cyan

coupler)

IT 184947-15-7P 184947-16-8P 184947-17-9P 184947-18-0P
 (in manuf. of pyrazolotriazole cyan coupler
 for silver halide photog.
 photosensitive material)

IT 105-34-0, Methyl cyanoacetate 684-80-0 15159-40-7, 4-Morpholinecarbonyl chloride 39416-48-3 163119-16-2 184947-14-6

(in manuf. of pyrazolotriazole cyan coupler for silver halide photog. photosensitive material)

L25 ANSWER 37 OF 39 HCA COPYRIGHT 2003 ACS

126:39642 Silver halide color photographic
material and image formation using it. Ozawa, Takashi;
Takizawa, Hiroo; Shimada, Yasuhiro; Ito, Takayuki (Fuji Photo Film
Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08262662 A2
19961011 Heisei, 57 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1995-67471 19950327.

GI

The material contains a cyan coupler I [Z1 = CR6, N; when Z1 = CR6, Z2 = N and when Z1 = N, Z2 = CR6; R1-5 = H, substituent; R6 = substituent; Z = nonmetal atoms to form (substituted) ring; X = (substituted) amino, aryl, heterocycle] and H-donating compd to form H-bond. The H-donating compd. may be II, R22ANHR23, R24R25NCONHR26, or (R270p)(R280q)P(:0)NHR29 (R21 = substituent; m = 1-5; R22, R25, R27, R28 = aliph. group or aryl; R23, R24, R26, R29 = H, aliph. group, aryl; A = SO2, CO, OCO; p, q = 0 or 1; the total C no. of the each group is 13-60). The material is imagewise exposed, black-and-white-developed, and processed with a color developing soln. with pH .gtoreq.11 to form an image.

The material shows stable coloring properties independent of the

compns. of bleaching soln. and provides high quality cyan images with good storage stability.

IT 178744-07-5

> (pyrrolotriazole deriv. photog. cyan coupler)

RN 178744-07-5 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, CN 6-cyano-2-[4-[[1,4-dioxo-4-(tetradecyloxy)butyl]amino]phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

IC ICM G03C007-38

> G03C005-50; G03C007-00; G03C007-388; G03C007-407 ICS

74-2 (Radiation Chemistry, Photochemistry, and CC Photographic and Other Reprographic Processes)

ST pyrrolotriazole cyan coupler photog; hydrogen donating compd photog film

ITPhotographic films

(photog. film contg. pyrrolotriazole cyan

coupler and hydrogen-donating compd.)

IΤ Cyan couplers

(pyrrolotriazole deriv. photog. cyan coupler)

IT 178744-15-5P

(bromination of; prepn. of pyrrolotriazole deriv. photog . cyan coupler)

IT 178744-17-7P

> (hydrolysis of; prepn. of pyrrolotriazole deriv. photog . cyan coupler)

IT 22164-72-3 88389-80-4 136664-55-6 136664-65-8 160379-87-3 173982-24-6 174285-88-2 184773-63-5 184773-64-6 184773-67-9 184773-68-0 184773-69-1 184773-70-4

(photog. film contg. pyrrolotriazole cyan coupler and hydrogen-donating compd.)

178744-16-6P IT 178744-18-8P (prepn. of pyrrolotriazole deriv. photog. cyan coupler)

1T 105-34-0, Methyl cyanoacetate 111-94-4 503-38-8, Trichloromethyl chloroformate 15159-40-7, 4-Morpholinecarbonyl chloride 163119-16-2, 2,6-Di-tert-butyl 4-methylcyclohexanol 178744-14-4 178744-19-9

(prepn. of pyrrolotriazole deriv. photog. cyan coupler)

IT 178744-07-5 182920-44-1 183744-87-8 183744-89-0 184773-61-3 184773-62-4 (pyrrolotriazole deriv. photog. cyan coupler)

IT 178743-91-4P 178743-95-8P (pyrrolotriazole deriv. photog. cyan coupler)

L25 ANSWER 38 OF 39 HCA COPYRIGHT 2003 ACS
125:288719 Silver halide color photographic
material containing pyrroloazole cyan coupler
and hydrazine compound. Fukuzawa, Yutaka; Nakamura, Takashi; Ono,
Michio (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP
08201999 A2 19960809 Heisei, 50 pp. (Japanese). CODEN:
JKXXAF. APPLICATION: JP 1995-27753 19950125.

R¹ R²

$$x \longrightarrow_{N} NH$$
 $z_a = z_b$
 z_b

The photog. material contains a cyan coupler I (Za, Zb = CR3, N; R1, R2 = electron-attractive group having Hammett's .sigma.p const. 0.20-1.0; R3 = substituent; X = H, leaving group) and a hydrazine compd. (R21NA21NA22)mP(:X)(R22)n (R21 = aryl, heterocyclic group; R22 = alkyl, cycloalkyl, aryl, alkoxy, aryloxy; A21, A22 = H, group leaving with alkali; m = 1, 2, 3; n = 0, 1, 2; m + n = 3; X = S, O). The photog. material shows good storage stability and gives clear color photog. images without spots.

IT 182920-44-1

(Ag halide color photog. material contg. pyrroloazole cyan coupler and hydrazine compd.)

RN 182920-44-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[2-methoxy-5-[[[2-(octyloxy)-5-(1,1,3,3-

tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4methylcyclohexyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{N} \\ \text$$

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IC
     ICM
          G03C007-38
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IT

ICS G03C005-50; G03C007-00; G03C007-392; G03C007-407

74-2 (Radiation Chemistry, Photochemistry, and CC Photographic and Other Reprographic Processes)

ST pyrroloazole cyan coupler photog; hydrazine color photog material

IT Photographic couplers

(cyan, Ag halide color

photog. material contg. pyrroloazole cyan

coupler and hydrazine compd.)

IT 180639-07-0 182801-44-1 182801-45-2 182920-40-7

182920-44-1 182920-47-4 **182920-50-9**

182920-81-6 182920-88-3 182920-91-8 182920-94-1

(Ag halide color photog. material contg. pyrroloazole cyan coupler and

hydrazine compd.)

IT 178743-91-4P **178743-95-8P** 180051-26-7P 180051-27-8P (Ag halide color photog. material contg. pyrroloazole cyan coupler and hydrazine compd.)

IT 112-53-8, 1-Dodecanol 814-49-3, Diethyl chlorophosphate 10025-87-3, Phosphorus oxychloride 182801-46-3

(in prepn. of hydrazine compd. for photog. material) 178744-15-5P 178744-16-6P 178744-17-7P 178744-18-8P

178744-19-9P 178744-20-2P

(in prepn. of pyrroloazole photog. cyan coupler)

IT 111-94-4 503-38-8 15159-40-7, 4-Morpholinecarbonyl chloride 163119-16-2 178744-14-4

(in prepn. of pyrroloazole photog. cyan coupler)

ANSWER 39 OF 39 HCA COPYRIGHT 2003 ACS

125:44970 Silver halide color reversing photographic material with superior color reproducibility and sharpness and its processing. Fukagawa, Nobutaka; Kawagishi, Toshio (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08095211 A2 **19960412** Heisei, 102 pp. (Japanese). JKXXAF. APPLICATION: JP 1994-254115 19940926.

In the title full color photog. material, .gtoreq.1 red AB sensitive layer contains a 5-5-membered or a 5-6-membered condensed N-contg. heterocyclic cyan coupler, or .gtoreq.1 blue-sensitive layer contains an indoline yellow coupler, and .gtoreq.1 layer contains compd. $A-\{(L1)a-(B)m\}p-(L2)n-DI$ (A, B = releasing group upon reacting with an oxidized arom. primary amine developer; L1, L2 = releasing group; DI = development suppressor of suppressing strength .gtoreq.1 and .ltoreq.5; a, m, n = 0, 1; p = Processing the photog. material includes exposing, black-and-white developing, fogging the unexposed Ag halide particles and color developing.

IT 177984-72-4

> (cyan coupler for color reversing photog. film)

RN177984-72-4 HCA

1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, CN 2-[5-[[[3-carboxy-4-(octyloxy)phenyl]sulfonyl]amino]-2methoxyphenyl]-6-cyano-5-[[(diphenylamino)carbonyl]oxy]-, 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] ester (9CI) INDEX NAME)

PAGE 1-A

PAGE 1-B

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- (CH<sub>2</sub>)<sub>7</sub>-Me
 IC
      ICM G03C007-00
           G03C005-50; G03C007-305; G03C007-36; G03C007-38; G03C007-407
      74-2 (Radiation Chemistry, Photochemistry, and
 CC
      Photographic and Other Reprographic Processes)
      color reversing photog material coupler; DIR
ST
      compd color reversing photog material
      Photographic films
 IT
         (color reversing; contg. cyan coupler or
        yellow coupler and specified DIR compd.)
IT
     Photographic processing
         (including black-and-white developing and color developing)
IT
     Photographic couplers
         (cyan, for color reversing photog. material)
IT
     177984-68-8
                    177984-69-9
         (DIR compd. for color reversing photog. film)
IT
     177984-70-2P
         (DIR compd. for color reversing photog. film)
     177984-71-3 177984-72-4 177984-73-5
IT
     177984-74-6
         (cyan coupler for color reversing
        photog. film)
IT
     105219-34-9P
                     113824-73-0P
                                    177984-77-9P
                                                    177984-78-0P
     177984-79-1P
        (prepd. for prepn. of DIR compd. for color reversing
        photog. film)
     6674-22-2, 1,8-Diazabicyclo[5,4,0]-7-undecene
IT
                                                       30525-89-4,
     Para-formaldehyde 49783-80-4, 4-Aminomethylbenzenesulfonamide
     hydrochloride
                    54978-55-1
        (prepn. of DIR compd. for color reversing photog. film)
IT
     153723-45-6
                   177984-75-7
                                  177984-76-8
        (yellow coupler for color reversing photog.
        film)
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